TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AGENDA ITEM REQUEST
for Proposed State Implementation Plan Revision

AGENDA REQUESTED: September 9, 2009

DATE OF REQUEST: August 21, 2009

NAME & NUMBER OF PERSON TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Kerry Howard, 239-0556

CAPTION: Docket No. 2008-0335-SIP Consideration for publication of, and hearing on, proposed revisions to the state implementation plan to implement revisions of the Federal Clean Air Interstate Rule (CAIR) and Senate Bill 1672 of the 80th Texas Legislature, Regular Session in 2007. The proposed revisions incorporate federal changes to the CAIR program; methodology for allocation of CAIR nitrogen oxides (NO_X) allowances as specified by Senate Bill 1672, 80th Texas Legislature, Regular Session; and non-substantive administrative changes. (Kim Herndon, Terry Salem) (Project No. 2007-051-SIP-NR)

Chief Engineer

Division Director

Agenda Coordinator

Copy to CCC Secretary? NO_X_ YES__

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** August 21, 2009

Thru: LaDonna Castañuela, Chief Clerk
Mark R. Vickery, P.G., Executive Director

From: Susana M. Hildebrand, P.E., Chief Engineer 7.14.09
Chief Engineer's Office

Docket No.: 2008-0335-SIP

Subject: Commission Approval for the Proposed Clean Air Interstate Rule (CAIR) State Implementation Plan (SIP) Revision

Project No. 2007-051-SIP-NR

Reasons for the SIP revision package:
To meet the requirements established by the United States Environmental Protection Agency (EPA) for the CAIR Phase II (2015 and thereafter) nitrogen oxides (NO_X) allocation submittal, Texas must submit a CAIR SIP revision to the EPA in early 2010. This revision will allow the EPA adequate time to review and approve CAIR Phase II for Texas to use the NO_X allocation methodology specified in Senate Bill (SB) 1672[1], 80th Texas Legislature, Regular Session. In addition to the allocation issues relating to CAIR, the EPA has also revised the federal CAIR program five times since Texas adopted its initial CAIR SIP revision on July 12, 2006. This proposed CAIR SIP revision will also address proposed revisions to 30 Texas Administrative Code (TAC) Chapter 101 from the legislation.

For Texas to submit an approvable CAIR SIP revision, the state and federal requirements need to be consistent with each other. If Texas does not submit a CAIR SIP revision that incorporates the federal revisions, the EPA would require Texas to use the EPA's model CAIR rule NO_X allocation methodology. The model CAIR rule's NO_X allocation methodology is substantially different than the methodology prescribed in SB 1672. Texas' NO_X allocation methodology for Phase I was approved by the EPA and published in the *Federal Register* on July 30, 2007 (72 FR 145).

In 2007, the 80th Texas Legislature passed SB 1672, requiring the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision on July 12, 2006, as well as revisions to the NO_X allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_X allowance adjustments that were directed by House Bill (HB) 2481[2]. HB 2481 revised the baseline of existing units every five years by using the three highest years heat input data from the previous seven years. However, this seven-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, SB 1672 changed the number of control periods from seven to nine and shifted the allocation update from 2016 to 2018.

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[1] Act of May 10, 2007, 80th Leg. ,R.S., SB 1672, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources).

[2] Act of June 18, 2005, 79th Leg., R.S., HB. 2481, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources).

Re: Docket No. 2008-0335-SIP

Because of this legislative change in SB 1672, new[3] electric generating units (EGU) in the years 2016 and 2017 with five or more consecutive years of operation will roll into the existing[4] EGU allocation pool. This is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_X allowances will not fluctuate and will remain consistent for five years at a time.

SB 1672 also omits the reference date of the federal CAIR program that was specified in HB 2481 from the 79th Texas legislative session. This change will enable the commission to make subsequent changes as dictated by federal rule change for CAIR.

Revisions to the CAIR SIP and rule to implement SB 1672 were proposed to the commissioners on May 21, 2008. On July 11, 2008, the United States Court of Appeals District of Columbia Circuit (Court) (No. 05-1244) vacated CAIR and the CAIR Federal Implementation Plan (FIP). Because of the Court's ruling, the TCEQ withdrew the CAIR SIP and rule revision adoption packages from the November 19, 2008, agenda to await further direction from the EPA.

On December 23, 2008, the Court issued a revised opinion to remand, without vacating, CAIR to the EPA. Therefore, CAIR will remain in effect while the EPA analyzes data and conducts rulemaking to modify the program to comply with the Court's July 2008 opinion. The Court declined to impose a schedule by which the EPA must complete the rulemaking, but reminded the EPA that the Court does ". . . not intend to grant an indefinite stay of the effectiveness of this Court's decision." Therefore, with CAIR in place, staff is proceeding with the CAIR program as directed by the Texas legislature.

This proposed CAIR SIP revision contains:

- Federal changes to the CAIR program, as specified below (specifics regarding these changes can be found in Chapter 1 – General);
- Methodology for allocation of CAIR NO_X allowances as specified in SB 1672; and
- Non-substantive administrative changes.

Under what authority are we proposing these changes?
The authority to propose and adopt the SIP is derived from Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.002, which provides that the policy and purpose of the TCAA is to safeguard the state's air resources from pollution; TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; and §382.0173, which authorizes the commission to adopt SIP and rule requirements relating to CAIR.

Is this SIP revision required by federal rule or state statute? Which ones?
Yes – The CAIR SIP revision is required by both federal rule and state statute.

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[3] New EGU - Units commencing operation on or after January 1, 2001.

[4] Existing EGU - Units commencing operation before January 1, 2001.

Federal changes to the CAIR program:
Following are the federal changes to the CAIR program since May 12, 2005, that are being proposed for incorporation in this SIP revision. A brief description of each change is given from the most recent change as well as the *Federal Register* citation to provide additional information.

Federal Implementation Plans (FIP) for the Clean Air Interstate Rule: Automatic Withdrawal Provisions – 40 CFR Part 52 – Direct Final Rule
November 2, 2007, *Federal Register*
The EPA took a direct final action to amend the FIP for CAIR to provide for an automatic withdrawal of CAIR FIPs in a state upon the effective date of the EPA's approval of a full SIP revision meeting the CAIR requirements. All CAIR states are required to revise their SIPs to include control measures to reduce the emission of NO_X and/or sulfur dioxide (SO_2). In this FIP rulemaking, the EPA stated it would withdraw the FIP in a state in coordination with the full approval of the state's CAIR SIP. In this action, the EPA makes the FIP withdrawal for the state automatic upon approval of the full CAIR SIP revision. Note that the EPA has said that it will give partial approval if the SIP is approved after the EPA makes allowances under the FIP for the year; the SIP approval would be fully valid for the next year. The EPA believes that this will correct the deficiency that provided the basis for the EPA's promulgation of the FIPs. The direct final rule was effective on January 16, 2008.

Revisions to Definition of Cogeneration Unit (CAIR); CAIR Federal Implementation Plans (FIP); Clean Air Mercury Rule (CAMR); and Technical Corrections to CAIR, CAIR FIPs, CAMR, and the Acid Rain Program Rules – 40 CFR Parts 51, 60, 72, 78, 96, and 97
October 19, 2007, *Federal Register*
The CAIR, CAIR FIP, and CAMR rule each include an exemption for cogeneration units that meet certain criteria. In light of information concerning biomass-fired cogeneration units that may not qualify for the exemption due to their particular combination of fuel and technical design characteristics, the EPA changed the cogeneration unit definition in CAIR, the CAIR model cap and trade rules, the CAIR FIPs, CAMR, and the CAMR model cap and trade rule. Specifically, the EPA revised the calculation methodology for the efficiency standard in the cogeneration unit to exclude energy input from biomass making it more likely for units co-firing biomass to be able to meet the efficiency standard and qualify for an exemption. Because the EPA predicts that this change will only affect a small number of relatively low-emitting units, the revision will have little effect on the projected emissions reductions and the environmental benefits of these rules. This action also clarifies the term "total energy input" used in the efficiency calculation and makes minor technical corrections to CAIR, the CAIR FIPs, CAMR, and the Acid Rain Program rules. This rule revision was effective on November 19, 2007.

Clean Air Interstate Rule (CAIR) and CAIR Federal Implementation Plans (FIP); Corrections – 40 CFR Parts 51 and 97
October 1, 2007, *Federal Register*
The EPA made minor corrections to CAIR to restore a phrase of regulatory text related to state annual emissions reporting requirements that was inadvertently deleted when the rule was amended in 2006. This rule also corrects typographical errors in the spellings of three states in the CAIR regulatory text and corrects a typographical error in a section citation in the CAIR FIP regulatory text. This rule revision was effective on October 1, 2007.

Clean Air Interstate Rule (CAIR) and Federal Implementation Plans for CAIR; Corrections – 40 CFR Parts 51, 96, and 97
December 13, 2006, *Federal Register*

The EPA made minor corrections to the CAIR and the FIPs for CAIR to clarify text that may potentially be misleading. This rule does not change any of CAIR or CAIR FIPs rule requirements or substantively change the rules in any way. This rule revision was effective on December 13, 2006.

Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program – CFR Parts 51, 52, 72, 73, 74,78, 96, and 97
April 28, 2006, *Federal Register*
The EPA took action to address the interstate transport of emissions of NO_X and SO_2 that contribute significantly to nonattainment and maintenance problems with respect to the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$ and eight-hour ozone. As one part of this action, the EPA provided its final response to a petition submitted to the EPA by the State of North Carolina under Section 126 of the FCAA. The petitioner requested that the EPA find that SO_2 and/or NO_X emissions from EGUs in 13 states were significantly contributing to $PM_{2.5}$ and/or eight-hour ozone nonattainment and maintenance problems in North Carolina and requested that the EPA establish control requirements to prohibit such significant contribution. The EPA denied the petition because, in this action, the EPA promulgated FIPs for all jurisdictions covered by the CAIR to address interstate transport.

The FIPs will regulate EGUs in the affected states and achieve the emissions reductions requirements established by the CAIR states that do not have approved SIPs to achieve the reductions. As the control requirements for the FIPs, the EPA adopted the model trading rules that the EPA provided in CAIR as a control option for states, with minor changes to account for federal rather than state implementation.

This action also revised the CAIR SIP model trading rules in order to address the interaction between the EPA-administered CAIR FIP trading programs being promulgated and the EPA-administered CAIR state trading programs that will be created by any state that elects to submit a SIP establishing such a trading program to meet the requirements of the CAIR. In addition, the EPA took final action on its reconsideration of the definition of EGU as it relates to solid waste incinerators.

This action also made revisions to the Title IV Acid Rain Program in order to make the administrative appeals procedures, which currently apply to final determinations by the Administrator under the EPA-administered CAIR state trading programs, also apply to the EPA-administered CAIR state trading programs and to the EPA-administered trading program under the FIP action. In addition, the EPA made certain minor revisions to the Acid Rain Program that will apply to all affected units.

The definition of CAIR EGU applicability has also been revised. CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the startup of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit. This rule revision became effective on June 27, 2006.

State legislative changes:
In 2007, the 80th Texas Legislature passed SB 1672, which directed the TCEQ to incorporate subsequent federal CAIR changes that the EPA finalized since the initial adoption of the CAIR SIP revision on July 12, 2006, as well as revisions to the NO_X allocation methodology as prescribed by SB 1672. SB 1672 relates to correcting the number of minimum periods specified for NO_X allowance adjustments that were directed by HB 2481. HB 2481 adjusted the baseline of existing units every five years by using the three highest years of heat input data from the previous seven years. However, the seven-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672. SB 1672 also shifted the allocation update from 2016 to 2018.

Because of the legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will obtain allowances from the existing allocation pool. This revision is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_X allowances would not fluctuate and would remain constant for five years.

Are there any legal deadlines by which this SIP revision must be proposed, adopted, or effective?
To meet the requirements established by the EPA for CAIR Phase II NO_X allocation submittal, Texas must submit a CAIR SIP revision to the EPA by early 2010. This timeline will allow the EPA adequate time to review and approve the CAIR Phase II for Texas to use the NO_X allocation methodology specified in SB 1672. The Phase II NO_X allocations must be submitted to the EPA by October 31, 2011.

What issue(s) or problem(s) are we trying to solve?
This CAIR SIP revision incorporates federal rule changes and state statute changes that will allow Phase II of the CAIR program for Texas to be approved by the EPA.

Why is it important that we do this SIP revision package?
Texas must have an approved CAIR SIP revision to allow the TCEQ to distribute NO_X allowances to EGUs for CAIR Phase II (2015 through thereafter), as directed by Texas Health and Safety Code (THSC), § 382.0173.

Other important background or historical information:
Texas' NO_X allocation methodology for Phase I and allowance allocation methodology for the compliance supplemental pool was approved by the EPA on July 30, 2007 (72 FR 145). The remaining portion of the CAIR program for Texas is currently under the CAIR FIP.

Scope of the SIP revision:
This CAIR SIP revision contains:

- Federal changes to the CAIR program;
- Methodology for allocation CAIR NO_X allowances as specified in SB 1672; and
- Non-substantive administrative changes.

Changes required by federal rule:
The EPA had five revisions to the CAIR program since May 12, 2005, published in the *Federal Register*. A brief description of each change is included in the "Federal changes to the CAIR program" section of this executive summary.

Changes required by state statute:
The 80th Legislature, 2007, enacted SB 1672 promulgating THSC, § 382.0173(e)(3) that directs the commission to incorporate the EPA's final rulemaking action into state rules for both CAIR and CAMR.

Staff recommendations that are not expressly required by federal rule or state statute:
Because of the legislative change in SB 1672 that shifted the revision of the baseline from 2016 to 2018, staff is proposing that new units in the years 2016 and 2017 with five or more consecutive years of operation receive allowances from the existing allocation pool. This revision is consistent with how new units that become existing units with five or more consecutive years of operation are provided NO_X allowance allocations for the 2015 control period under the federal CAIR program.

Beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. Therefore, starting in 2018, new units during this five-year baseline readjustment, with five or more years of operation, will be reclassified from a new unit to an existing unit. Therefore, the number of NO_X allowance allocations would not fluctuate and would remain constant for five years. This consistency will provide stability to EGUs as they plan operations.

Impact on the regulated community:

Who will be affected?
EGUs as defined by the EPA and the public will be affected by the rule revisions associated with this CAIR SIP revision. CAIR emission reductions are focused on new and existing EGUs statewide as defined by the EPA.

Does this CAIR SIP revision create a group of affected persons who were not affected previously? How?
No

Will there be a fiscal impact? If so, estimate.
There is no specific fiscal impact associated with the CAIR SIP revision. The fiscal impact, if any, will be tied to the proposed changes to Chapter 101.

Impact on the public:

Who will be affected?
The public would realize public health and environmental benefits based on the reductions in NO_X and SO_2 emissions. The EPA expects regional electricity prices will not be significantly impacted by CAIR and are projected to be below 2000 levels.

Does it create a group of affected persons who were not affected previously? How?
No – The CAIR SIP revision will not affect a new group of individuals from the previously adopted CAIR SIP revision in July 2006.

Will there be a fiscal impact? If so, estimate.
No

Impact on agency programs:
The CAIR SIP revision will affect the following agency offices: the Chief Engineer's Office; the Office of Permitting and Registration; the Office of Compliance and Enforcement; and the Office of Legal Services.

Stakeholder meetings:

Have any stakeholder meetings been held?
Stakeholder meetings were not necessary to support the rulemaking required by the proposed CAIR SIP revision. Revisions to the SIP and changes to the rule have both been directed by the 80th Texas Legislature in SB 1672, THSC §382.0173.

With whom?
N/A

What were the general sentiments?
N/A

Were any changes made in response to stakeholder concerns?
N/A

Policy issues:

What policy issues are affected?
The timing of moving new EGUs from new to existing EGUs in 2016, 2017, and every five years thereafter beginning in 2018 is an outstanding policy issue that is addressed in the CAIR SIP revision proposal. Additional information is provided in the next subsection.

Are any policies that are not currently based on rule being made into a rule?
Because of the legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will receive allowances from the existing allocation pool. This policy would be consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input would be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment would happen every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from a new unit to an existing unit. Therefore, the number of NO_X allowance allocations would not fluctuate and would remain constant for five years.

What are the consequences if this SIP revision is not approved to go forward?
If the CAIR SIP revision does not proceed through to the adoption process, Texas will not have an approved CAIR SIP for Phase II of CAIR that begins in 2015 and therefore will not be able to

allocate NO_X allowances as directed by SB 1672. To meet the requirements established by the EPA for CAIR Phase II NO_X allocation submittal, Texas must submit a CAIR SIP revision to the EPA by early 2010. This timeline will allow the EPA adequate time to review and approve the CAIR Phase II for Texas to use the NO_X allocation methodology specified in SB 1672. The Phase II NO_X allocations must be submitted to the EPA by October 31, 2011.

Are there alternatives?
No – The CAIR SIP revision is needed because of federal rule changes and state statute.

Potentially controversial matters:
There are no known controversial issues at this time.

Key points in proposed SIP revision schedule:

Anticipated proposal date: September 9, 2009
Anticipated *Texas Register* hearing notice date: September 25, 2009
Public hearing date (if any): October 20, 2009, Fort Worth; October 21, 2009, Austin; and October 22, 2009, Houston
Public comment period: September 25 – October 26, 2009
Anticipated adoption date: February 2010

Agency contacts:
Kim Herndon, Project Manager, 239-1421, Air Quality Division
Terry Salem, Staff Attorney, 239-0469
Amy Browning, Staff Attorney, 239-0891

Attachment

cc: Chief Clerk, 5 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Daniel Womack
Kevin Patteson
Betsy Bird
Office of General Counsel
Kim Herndon

REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP) FOR ELECTRIC GENERATING UNITS STATEWIDE TO REDUCE FINE PARTICULATE MATTER OF 2.5 MICRONS AND LESS ($PM_{2.5}$) TRANSPORT EMISSIONS

CLEAN AIR INTERSTATE RULE
(CAIR)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13087
AUSTIN, TEXAS 78711-3087

DOCKET No. 2008-0335-SIP

PROJECT No. 2007-051-SIP-NR

Chapter 101 - 2007-053-101-EN (CAIR)

Proposal

September 9, 2009

SECTION VI. CONTROL STRATEGY

A. Introduction (No change.)

B. Ozone (No change.)

C. Particulate Matter (No change.)

D. Carbon Monoxide (No change.)

E. Lead (No change.)

F. Oxides of Nitrogen (No change.)

G. Sulfur Dioxide (No change.)

H. Conformity with the National Ambient Air Quality Standards (No change.)

I. Site Specific (No change.)

J. Mobile Source Strategies (No change.)

K. Clean Air Interstate Rule (Revised.)

L. Transport (No change.)

M. Regional Haze (No change.)

EXECUTIVE SUMMARY

This Clean Air Interstate Rule (CAIR) State Implementation Plan (SIP) revision is proposed to incorporate five federal rule revisions that the United State Environmental Protection Agency (EPA) has promulgated since the Texas Commission on Environmental Quality (TCEQ) adopted the initial CAIR SIP revision on July 12, 2006. This proposed CAIR SIP revision also addresses proposed revisions to 30 Texas Administrative Code (TAC) Chapter 101 resulting from legislation during the 80th Texas Legislature as prescribed by Senate Bill (SB) 1672[1]. Additional information regarding each of these changes can be found in Chapter 1: General. Non-substantive administrative changes are also addressed in this proposal.

In 2007, the 80th Texas Legislature passed SB 1672, directing the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision by the commission on July 12, 2006, as well as revisions to the nitrogen oxides (NO_X) allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_X allocation adjustments that were directed by House Bill 2481[2]. HB 2481 revised the baseline of existing units by reviewing heat-input data every five years by looking back at the three highest years of the previous seven years. However, the seven-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, SB 1672 changed the number of control periods from seven to nine and shifted the allocation update from 2016 to 2018.

Because of this legislative change in SB 1672, new[3] electric generating units (EGU) in the years 2016 and 2017 with five or more consecutive years of operation will obtain allowances from the existing[4] EGU allocation pool. This revision is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment is required every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_X allowances will not fluctuate and will remain constant for five years.

SB 1672 also omits the reference date of the federal CAIR program that was specified in HB 2481 from the 79th Texas legislative session. This change will enable the commission to make subsequent changes as dictated by federal rule change for CAIR.

This proposed CAIR SIP revision contains:

- Federal changes to the CAIR program, as specified below (specifics regarding these changes can be found in Chapter 1 – General);
- Methodology for allocation of CAIR NO_X allowances as specified under SB 1672, 80th Texas

[1] Act of May 10, 2007, 80th Leg. R.S., SB 1672, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix A.

[2] Act of June 18, 2005, 79th Leg., R.S., HB. 2481, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix B.

[3] New EGU - Units commencing operation on or after January 1, 2001.

[4] Existing EGU - Units commencing operation before January 1, 2001.

Legislature, 2007, Regular Session; and

- Non-substantive administrative changes.

Background

On May 12, 2005, CAIR was published in the *Federal Register*. The rule required 28 eastern states and the District of Columbia to reduce sulfur dioxide (SO_2) and/or NO_X emissions, which are precursors of $PM_{2.5}$ and ozone. Twenty-five states[5] and the District of Columbia must reduce annual SO_2 and NO_X emissions to attain the particulate matter of 2.5 microns and less ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS). Under CAIR, 25 states[6] and the District of Columbia, not including Texas, must reduce NO_X emissions for the purposes of attainment of the eight-hour ozone NAAQS. States were given the choice to use one of two compliance options from the EPA: meet the state's emission budget by requiring EGUs to participate in an EPA-administered interstate cap and trade program; or meet an individual state emissions budget through measures of the state's choosing. The 79th Texas Legislature in 2005 passed House Bill (HB) 2481 in its Regular Session requiring the TCEQ to adopt the EPA-administered interstate cap and trade program by reference and stipulating specifications for NO_X allowance allocations and set-asides for NO_X emissions, as well as only requiring reductions associated with CAIR from new and existing EGUs.

The EPA modeled 37 states, including Texas, for $PM_{2.5}$ contribution using the Community Multiscale Air Quality Model (CMAQ). State-by-state zero-out modeling was then used to quantify the state's contribution for SO_2 and NO_X. A criterion of 0.2 micrograms per cubic meter ($\mu g/m^3$) was used for determining whether SO_2 and NO_X emissions in a state made a significant contribution to $PM_{2.5}$ nonattainment in another state. The EPA's modeling demonstrated that Texas provided a contribution of 0.29 $\mu g/m^3$ with two downwind "linkages." The two downwind counties identified are Madison and Saint Clair in Illinois. For ozone contribution only, 31 states in the eastern United States were modeled. Since Texas was not included in the modeling exercise, the EPA did not determine that Texas contributed to ozone nonattainment in another state.

The control measures identified in the CAIR program to regulate EGUs through an interstate cap and trade program were approved by the EPA as an option under the program. Table ES-1: *CAIR NO_X Control Measures Reductions Within Texas* and Table ES-2: *CAIR SO_2 Control Measures Reductions Within Texas* provides an overview of projected emission reductions provided by the EPA[7] for SO_2 and NO_X, respectively.

[5] Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New York, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

[6] Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin.

[7] Web site information on projected NO_X and SO_2 emission reductions can be found at http://www.epa.gov/CAIR/tx.html

Table ES-1: CAIR NO_X Control Measures Reductions Within Texas

NO_X Emissions (thousand tons per year)	**2003**	**2009**	**2015**
Texas NO_X Emissions without CAIR	211	186	179
Texas NO_X Emissions with CAIR	N/A	167	159

(The EPA projects that by 2015, CAIR will help Texas sources reduce NO_X by 52,000 tons per year or 25 percent.)

Table ES-2: CAIR SO_2 Control Measures Reductions Within Texas

SO_2 Emissions (thousand tons per year)	**2003**	**2010**	**2015**
Texas SO_2 Emissions without CAIR	578	417	418
Texas SO_2 Emissions with CAIR	N/A	398	352

(The EPA projects that by 2015 CAIR will help Texas sources reduce SO_2 by 226,000 tons per year or 39 percent.)

CAIR consists of two phases for NO_X and SO_2 reductions with declining allocations. For Phase I, from 2009 through 2014, the Texas NO_X budget is 181,014 tons per year (tpy). For Phase II, from 2015 and thereafter, the Texas NO_X budget is 150,845 tpy. Allocations for NO_X and SO_2 are reflective of the budgets given in the EPA's May 12, 2005, CAIR rule (40 CFR Part 51.123(e)(2) - Annual NO_X Budgets; and 41 CFR Part 51.124 (e)(2) – Annual SO_2 Budgets). EGUs will have the option to hold, transfer, or sell allowances, but at the end of each year's reconciliation period, each EGU must have enough allowances in its compliance account to cover emissions during the control period.

SO_2 budgets are based on the existing Title IV program under the Federal Clean Air Act (FCAA). Title IV is also known as the Acid Rain program. Allowance allocations with annual state budgets for Phase I (2010 through 2014) are based on a 50 percent reduction of SO_2 emissions from all EGUs in the affected state. The initial Texas budget for Phase I is 320,946 tpy. In Phase II (2015 and beyond), emissions are based on a 65 percent reduction of Title IV allowances allocated to EGUs in the affected state for SO_2. The Texas budget for Phase II is 224,662 tpy. EGUs that are regulated by CAIR and were not regulated by the Acid Rain program will be required to obtain the needed SO_2 allowances to comply with CAIR obligations through the trading system.

The EPA's model emission trading rule, 40 CFR Part 96, is a market-based system designed to reduce the costs of complying with the new NO_X and SO_2 emission limits. The trading system places a collective cap on both NO_X and SO_2 emissions from EGUs and provides for the trading of allowances similar to Title IV of the FCAA's SO_2 Allowance Trading program. Texas EGUs will be allowed to trade NO_X

allowances only with other CAIR states[8] that are participating in the annual NO_X trading program. SO_2

[8] Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and

allowances can still be traded within the realm of the Title IV/Acid Rain program as defined under 40 CFR Part 96 AAA. EGUs subject to the Acid Rain program will be required to meet allowance requirements of that program in addition to CAIR's allowance requirements.

CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990[9] or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit.

By October 31, 2006, and in accordance with the requirements given in 40 Code of Federal Regulations (CFR) § 96.141 and incorporated in 30 TAC Chapter 101, Subchapter H, Division 7, the TCEQ provided the EPA with the initial NO_X allocations for 2009 through 2014 (Phase I of CAIR) to be distributed to the state's existing EGUs. The NO_X allocations were finalized by the EPA's Clean Air Markets Division in October 2007. For the 2015 control period of Phase II, Texas will submit to the EPA beginning October 31, 2011, the CAIR NO_X allocations for the control period in the sixth year after the year of the applicable deadline for submission under 40 CFR § 51.123(o)(2)(ii)(B).

The CAIR NO_X trading budget for each CAIR NO_X unit is based on the specific direction provided under SB 1672 of the 80th Texas Legislature 2007, Regular Session. A total amount of CAIR NO_X allowances equal to 9.5 percent of the CAIR NO_X trading budget for Texas will be set-aside as a special reserve for distribution to new units commencing operation on or after January 1, 2001. The remaining 90.5 percent of the CAIR NO_X trading budget for Texas will be distributed to units having commenced operation before January 1, 2001, based on a three-year average of the unit's historical heat input adjusted for the type of fuel burned. In performing the fuel adjustment, a unit's historical heat input will be multiplied by the following: 90 percent for coal-fired, 50 percent for natural gas-fired, and 30 percent for all other fossil fuels. Requests for allocations from new units are due to the TCEQ's executive director by May 1 annually.

In addition to the CAIR NO_X trading budget for Texas, the CAIR model trading rule provided an additional pool of allowances available for allocation in the 2009 control period to those CAIR NO_X units achieving early NO_X reductions in 2007 and 2008, or whose compliance with the CAIR NO_X reduction requirements for the 2009 control period would create undue risk to the reliability of electricity supply during the year 2009. This pool of NO_X allowances defined as the compliance supplement pool (CSP) equated to an additional 772 tons for Texas (40 CFR § 96.143). Section 101.508 outlines the requirements for the request by CAIR NO_X sources of allowances from the CSP.

The CAIR rule included a provision that other units may opt-in to the CAIR cap and trade program under

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Wisconsin.

[9] The definition of EGU was revised to include November 15, 1990, on April 28, 2006, (71 FR 82).

40 CFR Part 96 Subpart II for NO_X or 40 CFR Part 96 Subpart III for SO_2.

Enforcement responsibilities and expectations include requirements for the TCEQ to conduct pretest meetings with EGUs and observe stack testing and quality assurance testing/certification of monitoring systems. The federal regulations, 40 CFR Part 96 Subpart HH for NO_X and 40 CFR Part 96 Subpart HHH for SO_2, require that the TCEQ review each monitoring system certification application and issue written notice of approval or disapproval of an application within 120 days after receipt of a complete application (initial or recertification). A default approval is enacted if the certification is not issued within 120 days; however, the rule provides for later decertification, if necessary. The TCEQ will also be responsible for handling any monitoring system decertification actions, conducting site inspections and audits, and being the lead on any enforcement actions.

Title V permits were revised to reflect EGU participation in CAIR. Submission of CAIR permit applications is dictated by 40 CFR § 96.121 for NO_X and 40 CFR § 96.221 for SO_2. The TCEQ incorporated requirements for revising Title V permits in 30 TAC Chapter 122.

The TCEQ is participating in the EPA-administered interstate cap and trade program. Therefore, recordkeeping and reporting requirements for EGUs participating in CAIR will be directed and administered by the EPA's Clean Air Markets Division.

Texas' NO_X allocation methodology for Phase I was approved by the EPA on July 30, 2007, (72 FR 145). NO_X allocations from Phase I have been posted on the EPA's Web site.

On July 11, 2008, the United States Court of Appeals District of Columbia Circuit (Court) (No. 05-1244) vacated CAIR and the CAIR Federal Implementation Plan (FIP) and remanded it back to the EPA in its entirety.

On December 23, 2008, the Court issued a revised opinion to remand, without vacating, CAIR to the EPA. Therefore, CAIR will remain in effect while the EPA analyzes data and conducts rulemaking to modify the program to comply with the Court's July 2008 opinion. The Court declined to impose a schedule by which the EPA must complete the rulemaking, but reminded the EPA that the Court does ". . . not intend to grant an indefinite stay of the effectiveness of this Court's decision."

SECTION V: LEGAL AUTHORITY -

A. General

The Texas Commission on Environmental Quality (TCEQ) has the legal authority to implement, maintain, and enforce the National Ambient Air Quality Standards (NAAQS).

The first air pollution control act, known as the Clean Air Act of Texas, was passed by the Texas legislature in 1965. In 1967, the Clean Air Act of Texas was superseded by a more comprehensive statute, the Texas Clean Air Act (TCAA), found in Article 4477-5, Vernon's Texas Civil Statutes. The Legislature amended the TCAA in 1969, 1971, 1973, 1979, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, and 2009. In 1989, the TCAA was codified as Chapter 382 of the Texas Health & Safety Code.

Originally, the TCAA stated that the Texas Air Control Board (TACB) is the state air pollution control agency and is the principal authority in the state on matters relating to the quality of air resources. In 1991, the legislature abolished the TACB effective September 1, 1993, and its powers, duties, responsibilities, and functions were transferred to the Texas Natural Resource Conservation Commission (TNRCC). With the creation of the TNRCC, the authority over air quality is found in both the Texas Water Code and the TCAA. Specifically, the authority of the TNRCC is found in Chapters 5 and 7. Chapter 5, Subchapters A - F, H - J, and L, include the general provisions, organization, and general powers and duties of the TNRCC, and the responsibilities and authority of the executive director. This chapter also authorizes the TNRCC to implement action when emergency conditions arise and to conduct hearings. Chapter 7 gives the TNRCC enforcement authority. In 2001, the 77th Texas Legislature continued the existence of the TNRCC until September 1, 2013, and changed the name of the TNRCC to the Texas Commission on Environmental Quality (TCEQ).

The TCAA specifically authorizes the TCEQ to establish the level of quality to be maintained in the state's air and to control the quality of the state's air by preparing and developing a general, comprehensive plan. The TCAA, Subchapters A - D, also authorize the TCEQ to collect information to enable the commission to develop an inventory of emissions; conduct research and investigations; enter property and examine records; prescribe monitoring requirements; institute enforcement proceedings; enter into contracts and execute instruments; formulate rules; issue orders taking into consideration factors bearing upon health, welfare, social and economic factors, and practicability and reasonableness; conduct hearings; establish air quality control regions; encourage cooperation with citizens' groups and other agencies and political subdivisions of the state as well as with industries and the federal government; and establish and operate a system of permits for construction or modification of facilities.

Local government authority is found in Subchapter E of the TCAA. Local governments have the same power as the TCEQ to enter property and make inspections. They also may make recommendations to the commission concerning any action of the TCEQ that affects their territorial jurisdiction, may bring enforcement actions, and may execute cooperative agreements with the TCEQ or other local governments. In addition, a city or town may enact and enforce ordinances for the control and abatement of air pollution not inconsistent with the provisions of the TCAA or the rules or orders of the commission.

Subchapters G and H of the TCAA authorize the TCEQ to establish vehicle inspection and maintenance programs in certain areas of the state, consistent with the requirements of the federal Clean Air Act; coordinate with federal, state and local transportation planning agencies to develop and implement transportation programs and measures necessary to attain and maintain the NAAQS; establish gasoline

volatility and low emission diesel standards; and fund and authorize participating counties to implement vehicle repair assistance, retrofit and accelerated vehicle retirement programs.

B. Applicable Law

The following statutes and rules provide necessary authority to adopt and implement the SIP. The rules listed below have previously been submitted as part of the SIP.

Statutes

TEXAS HEALTH & SAFETY CODE, Chapter 382	September 1, 2009
TEXAS WATER CODE	September 1, 2009

All sections of each subchapter are included, unless otherwise noted.

Chapter 5: Texas Natural Resource Conservation Commission
Subchapter A: General Provisions
Subchapter B: Organization of the Texas Natural Resource Conservation Commission
Subchapter C: Texas Natural Resource Conservation Commission
Subchapter D: General Powers and Duties of the Commission
Subchapter E: Administrative Provisions for Commission
Subchapter F: Executive Director (except §§ 5.225, 5.226, 5.227, 5.2275, 5.231, 5.232, and 5.236)
Subchapter H: Delegation of Hearings
Subchapter I: Judicial Review
Subchapter J: Consolidated Permit Processing
Subchapter L: Emergency and Temporary Orders (§§ 5.514, 5.5145 and 5.515 only)
Subchapter M: Environmental Permitting Procedures (§ 5.558 only)

Chapter 7: Enforcement
Subchapter A: General Provisions (§§ 7.001, 7.002, 7.00251, 7.0025, 7.004, 7.005 only)
Subchapter B: Corrective Action and Injunctive Relief (§ 7.032 only)
Subchapter C: Administrative Penalties
Subchapter D: Civil Penalties (except § 7.109)
Subchapter E Criminal Offenses and Penalties: §§ 7.177, 7.179-7.183

Rules

All of the following rules are found in Title 30 Texas Administrative Code, as of the following effective dates:

Chapter 7, Memoranda of Understanding, §§ 7.110 and 7.119	May 2, 2002
Chapter 19, Electronic Reporting	March 1, 2007
Chapter 35, Subchapters A-C, K: Emergency and Temporary Orders and Permits; Temporary Suspension or Amendment of Permit Conditions	July 20, 2006
Chapter 39, Public Notice, §§ 39.201; 39.401; 39.403(a) and (b)(8)-(10); 39.405(f)(1) and (g);39.409; 39.411 (a), (b)(1)-(6) and (8)-(10) and (c)(1)-(6) and (d); 39.413(9), (11), (12) and (14); 39.418(a) and (b)(3) and (4); 39.419(a), (b),(d) and (e); 39.420(a), (b) and (c)(3) and (4); 39.423 (a) and (b); 39.601; 39.602; 39.603; 39.604; and 39.605	March 29, 2006

Chapter 55: Requests for Reconsideration and Contested Case Hearings; Public Comment, §§ 55.1; 55.21(a) - (d), (e)(2), (3), and (12), (f) and (g); 55.101(a), (b), and (c)(6) - (8); 55.103; 55.150; 55.152(a)(1), (2), and (6) and (b); 55.154; 55.156; 55.200; 55.201(a) - (h); 55.203; 55.205; 55.209, and 55.211	March 29, 2006
Chapter 101: General Air Quality Rules	January 1, 2009
Chapter 106: Permits by Rule, Subchapter A	June 30, 2004
Chapter 111: Control of Air Pollution from Visible Emissions and Particulate Matter	July 19, 2006
Chapter 112: Control of Air Pollution from Sulfur Compounds	July 16, 1997
Chapter 113: Standards of Performance for Hazardous Air Pollutants and for Designated Facilities and Pollutants	May 14, 2009
Chapter 114: Control of Air Pollution from Motor Vehicles	June 26, 2008
Chapter 115: Control of Air Pollution from Volatile Organic Compounds	July 19, 2007
Chapter 116: Permits for New Construction or Modification	May 29, 2008
Chapter 117: Control of Air Pollution from Nitrogen Compounds	March 4, 2009
Chapter 118: Control of Air Pollution Episodes	March 5, 2000
Chapter 122, § 122.122: Potential to Emit	December 11, 2002
Chapter 122, § 122.215: Minor Permit Revisions	June 3, 2001
Chapter 122, § 122.216: Applications for Minor Permit Revisions	June 3, 2001
Chapter 122, § 122.217: Procedures for Minor Permit Revisions	December 11, 2002
Chapter 122, § 122.218: Minor Permit Revision Procedures for Permit Revisions Involving the Use of Economic Incentives, Marketable Permits, and Emissions Trading	June 3, 2001

LIST OF ACRONYMS

Btu/KWh - British Thermal Unit per Kilowatt
CAIR - Clean Air Interstate Rule
CAMR - Clean Air Mercury Rule
CAMx - Comprehensive Air Model with Extensions
CFR - Code of Federal Regulations
CEMS - Continuous Emissions Monitoring System
CERR - Consolidated Emissions Reporting Rule
CMAQ - Community Multiscale Air Quality Modeling
CSP - Compliance Supplement Pool
EDMS - Emissions and Dispersion Modeling System
EGF - Electric Generating Facilities
EGU - Electric Generating Units
EI - Emissions Inventory
EIQ - Emissions Inventory Questionnaire
EPA - United State Environmental Protection Agency
EPN - Emission Point Number
FCAA - Federal Clean Air Act
FR - Federal Register
FTP - File Transfer Protocol
HB - House Bill
MMBtu - Million British Thermal Unit
MWe - Megawatt Electrical
MWh - Megawatt Hour
MPO - Metropolitan Planning Organization
NAAQS - National Ambient Air Quality Standards
NEI - National Emissions Inventory
NSR - New Source Review
NO_X - Nitrogen Oxides or Oxides of Nitrogen
PM - Particulate Matter
PM_{10} - Particulate Matter 10 microns and less
$PM_{2.5}$ - Particulate Matter 2.5 microns and less
SB - Senate Bill
SIP - State Implementation Plan
SO_2 - Sulfur Dioxide
STARS - State of Texas Air Reporting System
TAC - Texas Administrative Code
TACB - Texas Air Control Board
TCAA - Texas Clean Air Act
TCEQ - Texas Commission on Environmental Quality (commission)
TCM - Transportation Control Measure
TNRCC - Texas Natural Resource Conservation Commission
TPY - Tons Per Year
TTI - Texas Transportation Institute
TxDOT - Texas Department of Transportation
VOC - Volatile Organic Compound

CLEAN AIR INTERSTATE RULE (CAIR)
STATE IMPLEMENTATION PLAN (SIP) REVISION

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CHAPTER 1: GENERAL

1.1 BACKGROUND

"The History of the Texas State Implementation Plan (SIP)," a comprehensive overview of the SIP revisions submitted to the United States Environmental Protection Agency (EPA) by the State of Texas, is available at the following Web site: http://www.tceq.state.tx.us/implementation/air/sip/sipplans.html.

1.2 INTRODUCTION

Due to the complexity of the Clean Air Interstate Rule (CAIR) program, history as well as information regarding the current proposed CAIR SIP revision is provided.

1.2.1 History

On May 12, 2005, the EPA promulgated CAIR thru revisions to 40 CFR Parts 51, 72, 73, 74, 77, 78, and 96. The EPA provided two options for CAIR-affected states to be in compliance: meet the state's emission budget by requiring electric generating units (EGU) to participate in an EPA-administered interstate cap and trade system that caps emissions in two stages; or meet an individual state emission budget through measures of the state's choosing.

The 79th Texas Legislature, 2005, Regular Session passed House Bill (HB) 2481 requiring the commission to adopt portions of the CAIR rule by reference and stipulating specifications for allowances and set-asides for nitrogen oxides (NO_X) emissions. Therefore, the Texas Commission on Environmental Quality (TCEQ) must participate in the EPA-administered interstate cap and trade program. The previous CAIR SIP revision contained information to participate in the EPA-administered cap and trade program. This fulfills the requirements of the 79th Texas Legislature, 2005, Regular Session. The legislature provided the TCEQ the allocation methodology for the allocation of NO_X allowances and direction to adopt CAIR by reference.

Federal rulemaking for CAIR set annual NO_X and sulfur dioxide (SO_2) emissions budgets for Texas EGUs in two phases. Texas has a NO_X budget of 181,014 tons per year (tpy) for Phase I, 2009 through 2014, and 150,845 tpy for Phase II, 2015 and thereafter. The SO_2 budgets are based on Title IV allocations. Title IV is also known as the Acid Rain program. Annual SO_2 state budgets for the years 2010 through 2014, Phase I, are based on a 50 percent reduction from Title IV for all units in the affected state. The Texas SO_2 budget for Phase I is 320,946 tpy. Phase II budgets, in 2015 and beyond, are based on a 65 percent reduction of Title IV allowances allocated to units in the affected state for SO_2 controls. The Texas SO_2 budget for Phase II is 224,662 tpy. Texas is required to meet these budgets through the CAIR interstate trading program established under 40 Code of Federal Regulations (CFR) Part 51.123(e)(2) for NO_X emissions. The state budget for annual SO_2 emissions is established under 40 CFR Part 51.124(e)(2), as incorporated in 30 TAC Chapter 101, Subchapter H, Division 7. The Texas annual budgets for NO_X and SO_2 are noted in Table 1-1: *Texas CAIR Emissions Budgets in Tons Per Year*.

Table 1-1: Texas CAIR Emissions Budgets in Tons Per Year

Pollutant	Phase I[10] Budget	Phase II[11] Budget
NO_X	181,014	150,845
SO_2	320,946	224,662

The objective of CAIR is to reduce the effects of transport of ozone and fine particulate matter of 2.5 microns and less ($PM_{2.5}$) and its precursors. NO_X is a precursor to both ozone and $PM_{2.5}$ formation and SO_2 is a precursor to $PM_{2.5}$ formation. Ozone is the major component of smog and is formed in the atmosphere by the photochemical reaction of NO_X and reactive hydrocarbons (volatile organic compounds or VOC) in the presence of high temperatures and ultraviolet light. NO_X and SO_2 are the two main anthropogenic factors that contribute to the formation of $PM_{2.5.}$

Recognizing the potential health and welfare impacts of ozone and $PM_{2.5}$, the EPA established CAIR in the eastern portion of the United States, including Texas. Twenty-eight states and the District of Columbia are required to implement the two-phase CAIR rule. The EPA determined 25 states, including Texas, contribute to NO_X and SO_2 emissions that affect $PM_{2.5}$ levels in downwind states, and 25 states and the District of Columbia contribute to unhealthy levels of eight-hour ozone in downwind states. Texas is only considered to significantly contribute to $PM_{2.5}$ pollution in two Illinois counties: Madison and Saint Clair.

CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hours (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day that the unit first no longer qualifies as a cogeneration unit.

The EPA's model emission trading rules, 40 CFR Part 96 Subpart AA through II for annual NO_X emissions and 40 CFR Part 96 Subpart AAA through III for annual SO_2, are a market-based system designed to reduce the cost of complying with the NO_X and SO_2 emission limits. This trading system places a collective cap both on NO_X and SO_2 emissions from EGUs and provides for the trading of allowances similar to the Title IV of the Federal Clean Air Act's (FCAA) SO_2 Allowance Trading Program. The model emission trading rules to implement CAIR requirements in Texas are adopted in accordance with the requirements of Senate Bill (SB) 1672.

The 80th Texas Legislature, 2007, Regular Session passed SB 1672, which requires the commission to adopt the EPA-administered interstate cap and trade program by reference, but directs the commission to

[10] Phase I for NO_x 2009 through 2014; Phase I for SO_2 2010 through 2014.

[11] Phase II for NO_x 2015and thereafter; Phase II SO_2 2015 and thereafter.

use the NO_X allocation methodology specified in the bill. The previous Texas legislative session in 2005, adopted HB 2481, which required the commission to adopt the EPA-administered interstate cap and trade program by reference, but directed the commission to use the NO_X allocation methodology specified in the bill.

For NO_X allocations, 9.5 percent of the initial NO_X budget will be set aside for new units. New units, in operation on or after January 1, 2001, may only be allowed to receive allocations from this set aside. In 2016, new units will be reevaluated and if they do not have five years of operating data prior to the allocation date they will still be considered new. However, if there are five years of operating data, the new EGU will be reclassified as an existing unit.

For existing units, those in operation prior to January 1, 2001, allowances will be calculated using the average of the three highest amounts of the unit's adjusted control period heat input for 2000 through 2004 with the adjusted control period calculations as follows: for coal-fired units, the unit's control period heat input for such years is multiplied by 90 percent; for natural-gas fired units, the unit's control period heat input for such years is multiplied by 50 percent; and for other fossil fuel type units, the unit's control period heat input for such years is multiplied by 30 percent. Because of the legislative change in SB 1672, new[12] EGUs in the years 2016 and 2017 with five or more consecutive years of operation will receive an allocation from the existing[13] EGU allocation pool. This revision is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will occur every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_X allowance would not fluctuate and would remain constant for five years.

CAIR established a NO_X compliance supplement pool (CSP) for the annual NO_X program sources that contribute to $PM_{2.5}$ pollution in the CAIR program area. Texas has been given a CSP of 772 tons of NO_X for EGUs that make any early reductions in 2007 and 2008 or that demonstrate a need for additional allowances to ensure reliability of electric supply. The executive director will determine the distribution of the CSP.

1.2.2 Current Proposed CAIR SIP Revision

This CAIR SIP revision proposal contains:

- Federal changes to the CAIR program, as specified below;
- Methodology for allocation of CAIR NO_X allowances as specified under SB 1672, 80th Texas Legislature, 2007, Regular Session; and
- Non- substantive administrative changes.

1.2.2.1 Federal Changes to the CAIR Program

Following are the federal changes to the CAIR program since May 12, 2005. A brief description of each change is given from the most recent change as well as the *Federal Register* citation to provide additional information, if needed.

[12] New EGU - Units commencing operation on or after January 1, 2001.

[13] Existing EGU - Units commencing operation before January 1, 2001.

Federal Implementation Plans for the Clean Air Interstate Rule: Automatic Withdrawal Provisions – 40 CFR Part 52 – Direct Final Rule
***Federal Register,* November 2, 2007**
The EPA took a direct final action to amend the Federal Implementation Plans (FIP) for CAIR to provide for an automatic withdrawal of a CAIR FIP in a state upon the effective date of the EPA's approval of a full SIP revision meeting the CAIR requirements. All CAIR states are required to revise their SIPs to include control measures to reduce the NO_X and/or SO_2 emissions. The EPA issued CAIR FIPs on April 28, 2006, as a backstop to implement CAIR in each CAIR state until the state has an EPA-approved CAIR SIP in place to achieve the required reductions. In this FIP rulemaking, the EPA stated it would withdraw the FIPs in a state in coordination with the full approval of the state's CAIR SIP. In this action, the EPA makes the FIP withdrawal for the state automatic upon approval of the full CAIR SIP revision. Note that the EPA has said that it will give partial approval if the SIP is approved after the EPA makes allowances under the FIP for the year; the SIP approval would be fully valid for the next year. The EPA has stated that this automatic withdrawal provision will correct the deficiency that provided the basis for the EPA's promulgation of the FIPs for a state. The direct final rule was effective on January 16, 2008.

Revisions to Definition of Cogeneration Unit (CAIR); CAIR Federal Implementation Plans; Clean Air Mercury Rule (CAMR); and Technical Corrections to CAIR, CAIR FIPs, CAMR, and the Acid Rain Program Rules – 40 CFR Parts 51, 60, 72, 78, 96, and 97
***Federal Register,* October 19, 2007**
The CAIR, CAIR FIP, and CAMR rules each include an exemption for cogeneration units that meet certain criteria. In light of information concerning biomass-fired cogeneration units that may not qualify for the exemption due to their particular combination of fuel and technical design characteristics, the EPA changed the cogeneration unit definition in CAIR, the CAIR model cap and trade rules, the CAIR FIP, CAMR, and the CAMR model cap and trade rule. Specifically, the EPA revised the calculation methodology for the efficiency standard in the cogeneration unit to exclude energy input from biomass making it more likely for units co-firing biomass to be able to meet the efficiency standard and qualify for an exemption. Because the EPA predicts this change will only affect a small number of relatively low-emitting units, the revision will have little effect on the projected emissions reductions and the environmental benefits of these rules. This action also clarifies the term "total energy input" used in the efficiency calculation and makes minor technical corrections to CAIR, the CAIR FIPs, CAMR, and the Acid Rain Program rules. This rule revision was effective on November 19, 2007.

The revised definition of biomass, per 40 CFR § 51.124(q), means any organic material grown for the purpose of being converted to energy; any organic by-product of agriculture that can be converted to energy; or any material that can be converted into energy and is non-merchantable for other purposes, that is segregated from other non-merchantable material, and that is: a forest-related organic resource, including mill residues, pre-commercial thinnings, slash, brush, or byproduct from conversion of trees to merchantable material; or a wood material, including pallets, crates, dunnage, manufacturing and construction material (other than pressure-treated, chemically-treated, or painted wood products), and landscape or right-of-way tree trimmings.

Additional provisions were added to the definition of cogeneration unit in 40 CFR § 51.124(q). The existing definition of a cogeneration unit definition under CAIR means a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine: having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and producing during the 12-month period starting on the date the unit first produces

electricity and during any calendar year after which the unit first produces electricity – for a topping-cycle cogeneration unit, useful thermal energy not less than five percent of total energy output; and useful power that, when added to one-half of useful thermal energy produced, is not less then 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output. For a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input.

The additional provision that the EPA added includes that provided that the total energy input for a topping-cycle cogeneration unit, useful thermal energy not less than five percent of total energy output; and useful power that, when added to one-half of useful thermal energy produced, is not less then 42.5 percent of total energy input, if useful thermal energy produced is 15 percent or more of total energy output or not less than 45 percent of total energy input, if useful thermal energy produced is less than 15 percent of total energy output and for a bottoming-cycle cogeneration unit, useful power not less than 45 percent of total energy input of this definition shall equal the unit's total energy input from all fuel except biomass if the unit is a boiler.

The new exemption restricted to boilers does not apply to combustion turbines burning gas. This revision should not affect anyone in Texas. The TCEQ invites comment from anyone who believes they would be affected because they burn gas in biomass combustion turbines. TCEQ's opinion is that currently no one in Texas would be affected by the new cogeneration exemption. TCEQ invites comment from anyone who believes that they would meet the requirements of the exemption and would therefore be affected.

(Several petitions were filed against CAMR, and on February 8, 2008, the United States Court of Appeals District of Columbia Circuit (No. 05-1097) vacated CAMR. The EPA petitioned the United States Supreme Court to review the decision. On February 23, 2009, the United States Supreme Court declined to hear the case. This officially vacates CAMR at the federal level. Because CAMR was incorporated by reference, the state rules and plan submitted to the EPA for CAMR are no longer valid.)

Clean Air Interstate Rule (CAIR) and CAIR Federal Implementation Plans; Corrections – 40 CFR Parts 51 and 97
***Federal Register,* October 1, 2007**
The EPA made minor corrections to the CAIR to restore a phrase of regulatory text related to state annual emissions reporting requirements that was inadvertently deleted when the rule was amended in 2006. This rule also corrects typographical errors in the spellings of three states in the CAIR regulatory text and corrects a typographical error in a section citation in the CAIR FIPs regulatory text. This rule revision was effective on October 1, 2007.

Clean Air Interstate Rule (CAIR) and Federal Implementation Plans for CAIR; Corrections – 40 CFR Parts 51, 96, and 97
***Federal Register,* December 13, 2006**
The EPA made minor corrections to the CAIR and the CAIR FIP to clarify text that may potentially be misleading. These corrections do not change any of CAIR or CAIR FIPs rule requirements or substantively change the rules in any way. This rule revision was effective on December 13, 2006.

Rulemaking on Section 126 Petition From North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule (CAIR); Revisions to the Acid Rain Program – CFR Parts 51, 52, 72, 73, 74,78, 96, and 97
***Federal Register,* April 28, 2006**
The EPA took action to address the interstate transport of emissions of NO_X and SO_2 that contribute significantly to nonattainment and maintenance problems with respect to the National Ambient Air Quality Standards (NAAQS) for $PM_{2.5}$ and eight-hour ozone. As one part of this action, the EPA provided its final response to a petition submitted to the EPA by the State of North Carolina under Section 126 of the Federal Clean Air Act (FCAA). The petitioner requested that the EPA find that SO_2 and/or NO_X emissions from EGUs in 13 states were significantly contributing to $PM_{2.5}$ and/or eight-hour ozone nonattainment and maintenance problems in North Carolina and requested that the EPA establish control requirements to prohibit such significant contribution. The EPA denied the petition because, in this action, the EPA promulgated FIPs for all jurisdictions covered by the CAIR to address interstate transport.

The FIPs will regulate EGUs in the affected states and achieve the emissions reductions requirements established by the CAIR states that do not have approved SIPs to achieve the reductions. As the control requirements for the FIPs, the EPA adopted the model trading rules that the EPA provided in CAIR as a control option for states, with minor changes to account for federal rather than state implementation.

This action also revised the CAIR SIP model trading rules in order to address the interaction between the EPA-administered CAIR FIP trading programs being promulgated and the EPA-administered CAIR state trading programs that will be created by any state that elects to submit a SIP establishing such a trading program to meet the requirements of the CAIR. In addition, the EPA took final action on its reconsideration of the definition of "EGU" as it relates to solid waste incinerators.

This action also made revisions to the Acid Rain program in order to make the administrative appeals procedures, which currently apply to final determinations by the Administrator under the EPA-administered CAIR state trading programs, also apply to the EPA-administered CAIR state trading programs and to the EPA-administered trading program under the FIP action. In addition, the EPA made certain minor revisions to the Acid Rain program that will apply to all affected units.

The definition of CAIR EGU applicability has also been revised. CAIR applies to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit. This action became effective on June 27, 2006.

1.2.2.2 Texas Legislative Changes

In 2007, the 80th Texas Legislature passed SB 1672,[14] allowing the Texas Commission on Environmental Quality (TCEQ) to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision by the commission on July 12, 2006, as well as revisions to the NO_X allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_X allocation adjustments that were directed by HB 2481. HB 2481 revised the baseline of existing units by reviewing heat-input data every five years by using the three highest years heat input data from the previous seven years. However, the seven-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672. SB 1672 shifted the allocation update from 2016 to 2018.

Because of the legislative change in SB 1672, new units in the years 2016 and 2017 with five or more consecutive years of operation will receive allowances from the existing allocation pool. This revision is consistent with how new units are handled for the 2015 control period under the federal CAIR program. However, beginning in 2018 each existing unit's baseline heat input will be revised based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will occur every five years. During this five-year baseline readjustment, new units with five or more years of operation will be reclassified from new units to existing units. Therefore, the number of NO_X allowance would not fluctuate and would remain consistent for five years.

1.3 HEALTH EFFECTS

Exposure to $PM_{2.5}$ can cause acute and/or chronic health effects. Acute symptoms can include: lung irritation, coughing, wheezing, and difficulty taking deep breaths. Inflammation of the lungs can cause decreased lung function and aggravate existing respiratory diseases (e.g., asthma). Chronic exposure to some types of $PM_{2.5}$, such as diesel exhaust, may result in an increased risk of respiratory cancers such as lung cancer. The EPA has provided information in the CAIR preamble[15] outlining the benefits of $PM_{2.5}$ emission reductions through the CAIR program.

[14] Act of May 10, 2007, 80th Leg. , § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix B.

[15] Section X - Statutory and Executive Order Reviews (c) Human Health Benefit Analysis, 40 CFR Parts 51, 72, et al., Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to the NO_X SIP Call; Final Rule, May 12, 2005.

1.4 PUBLIC HEARING INFORMATION

The commission will hold public hearings at the following times and locations:

CITY	DATE	TIME	LOCATION
Fort Worth	October 20, 2009	2:00 p.m.	Texas Commission on Environmental Quality 2309 Gravel Drive
Austin	October 21, 2009	2:00 p.m.	Texas Commission on Environmental Quality 12100 North I-35 Building C, Room 131E
Houston	October 22, 2009	2:00 p.m.	Houston-Galveston Area Council (H-GAC) 3555 Timmons Lane, Number 120 Conference Room B

The comment period will open on September 25, 2009, and close on October 26, 2009. Written comments will be accepted via mail, fax, or through the eComments system. All comments should reference "the CAIR SIP revision" and Project Number 2007-051-SIP-NR. Comments may be submitted to Kim Herndon, MC 206, State Implementation Plan Team, Chief Engineer's Office, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087 or faxed to (512) 239-5687. Electronic comments may be submitted at *http://www5.tceq.state.tx.us/rules/ecomments.* File size restrictions may apply to comments submitted through the eComments system. Comments must be received by October 26, 2009.

Copies of the proposed SIP revision and all appendices can be obtained from the TCEQ's Web site at http://www.tceq.state.tx.us/implementation/air/sip/sipplans.html or upon request to:

Texas Commission on Environmental Quality
Air Quality Division
P. O. Box 13087
Mail Code 206
Austin, Texas 78711-3087
Re: CAIR SIP Information

1.5 SOCIAL AND ECONOMIC CONSIDERATIONS

For a detailed explanation of the social and economic issues involved with any of the measures, please refer to the preambles that precede each proposed rule package accompanying this SIP and to the CAIR rule as proposed and promulgated by the EPA.

1.6 FISCAL AND MANPOWER RESOURCES

The TCEQ has determined that its fiscal and manpower resources are adequate and will not be adversely affected through the implementation of this plan. Specific information regarding the TCEQ budget is available upon request.

1.7 COORDINATION WITH LOCAL AGENCIES

The TCEQ has determined that there will be no assignment to local agencies under 40 CFR § 51.232 to carry out allocations under the NO_X or SO_2 trading programs. However, pre-existing assignments to local agencies regarding various enforcement activities remain in effect and could be utilized if enforcement activities are delegated to the TCEQ from the EPA.

1.8 ORGANIZATIONS RESPONSIBLE FOR DEVELOPMENT, IMPLEMENTATION, AND ENFORCEMENT

The TCEQ is the agency delegated authority by the Texas Legislature regarding the protection of air quality in the State of Texas. Other local government entities also have limited authority regarding air quality matters in the State of Texas.

1.9 DATA AVAILABILITY

The TCEQ affirms that it will retain all data used in the preparation of this SIP revision. All supporting documentation and data are available from the TCEQ upon request or are publicly available via the TCEQ Web site at http://www.tceq.state.tx.us/implementation/air/sip/sipplans.html, subject to confidentiality restrictions, if applicable.

CHAPTER 2: EMISSIONS INVENTORY

2.1 BACKGROUND

The Air Emissions Reporting Requirements (AERR) (73 FR 76539, December 17, 2008) requires states to submit emissions inventories (EI) containing information regarding the emissions of criteria pollutants and criteria pollutant precursors (e.g., volatile organic compounds (VOC)). EIs are critical for the efforts of state, local, and federal agencies to attain and maintain the National Ambient Air Quality Standards (NAAQS) that the United States Environmental Protection Agency (EPA) has established for criteria pollutants such as ozone, particulate matter (PM), and carbon monoxide.

For areas that have failed to meet the NAAQS or are at risk of doing so, attainment of the NAAQS can be significantly impacted by interstate transport of pollutants. To address transport issues regarding ozone and fine particulate matter of 2.5 microns and less ($PM_{2.5}$), the EPA has promulgated the Clean Air Interstate Rule (CAIR). CAIR requires states that contribute significantly to nonattainment of the NAAQS for ozone and $PM_{2.5}$ in downwind states to include control measures to reduce nitrogen oxides (NO_X) and sulfur dioxide emissions (SO_2) in its state implementation plan (SIP) revision.

For transport SIP revisions, the upwind states must also submit SO_2 and NO_X emissions data per 40 Code of Federal Regulations (CFR) § 51.125. As one of the upwind states specified by the EPA, Texas, through the Texas Commission on Environmental Quality (TCEQ), is required to submit annual emissions data for all SO_2 and NO_X sources for which control measures were specified in its transport SIP revisions. Additionally, per 40 CFR § 51.125, the TCEQ must submit periodic emissions data every third year from all SO_2 and NO_X emissions sources in the state.

To comply with the CAIR reporting requirements, the commission will continue to submit to the EPA both an annual EI of all point sources within Texas, as well as a periodic emissions inventory (PEI), which will be submitted every three years. Generally, these EIs include source types present in an area, the amount of each pollutant emitted, and the types of processes and control devices employed at each plant or source category. To ensure triennial reporting of all SO_2 and NO_X emissions sources in the state, the PEI will include criteria pollutant emissions estimates from the four general categories of emissions sources described in this chapter. These categories will encompass the following emissions sources.

- Point sources will include, at a minimum, SO_2 and NO_X emissions from all stationary sources (including electric generating units (EGU) that meet the definition of major source as defined in 40 CFR § 70.2.
- Area sources will include SO_2 and NO_X emissions from minor fuel combustion sources.
- On-road mobile sources will include SO_2 and NO_X emissions from motor vehicle sources.
- Non-road mobile sources will include, but not be limited to, SO_2 and NO_X emissions from a wide range of mass transportation, marine transportation, and construction equipment.

EIs provide data for a variety of air quality planning tasks, including establishing baseline emission levels, calculating reduction targets, control strategy development for achieving the required emission reductions, emission inputs into air quality simulation models, and tracking actual emission reductions against the established emissions growth and control budgets.

2.2 POINT SOURCES

Stationary point source emissions data are collected annually from sites that meet the reporting requirements of 30 Texas Administrative Code §101.10. To collect the data, the TCEQ mails emissions inventory questionnaires (EIQ) to all sites identified as meeting the reporting requirements. Companies are required to report emissions data and to provide sample calculations used to estimate the emissions. Information characterizing the process equipment, the abatement units, and the emission points is also required. All data submitted in the EIQ are reviewed for quality assurance purposes and then stored in the State of Texas Air Reporting System (STARS) database. At the end of the annual reporting cycle, point source emissions data are reported each year to the EPA for inclusion in the National Emissions Inventory (NEI).

2.3 AREA SOURCES

To capture information about emissions sources that fall below the point source reporting levels and are too numerous or too small to identify individually, emissions from these "area" sources are estimated on a source category or group basis. Area sources include commercial, small-scale industrial, and residential categories of sources that use materials or operate processes that can generate emissions. Area sources can be divided into two groups characterized by the emission mechanism: hydrocarbon evaporative emissions or fuel combustion emissions. Examples of sources of evaporative losses include printing, industrial coatings, degreasing solvents, house paints, leaking underground storage tanks, gasoline service station underground tank filling, and vehicle refueling operations. Fuel combustion sources include stationary source fossil-fuel combustion at residences and businesses, as well as outdoor burning, structural fires, and wildfires. These emissions, with some exceptions, may be calculated by multiplication of an EPA-established emission factor (emissions per unit of activity) times the appropriate activity or activity surrogate responsible for generating emissions. Population is the most commonly used activity surrogate for many area source categories while other activity data include amount of gasoline sold in an area, employment by industry type, and acres of crop land.

2.4 NON-ROAD MOBILE SOURCES

Non-road sources include vehicles, engines, and equipment used for construction, agriculture, transportation, recreation, and many other purposes. Non-road vehicles are also referred to as "off-road" or "off-highway" vehicles and they do not normally operate on roads or highways. This broad category is comprised of a diverse collection of machines - many of which are powered by diesel engines including, but not limited to: agricultural equipment, commercial and industrial equipment, construction and mining equipment, lawn and garden equipment, aircrafts, locomotives, and commercial marines.

A Texas-specific version of the EPA's NONROAD 2005 model, called the Texas NONROAD (TexN) model, is used in calculating emissions from all non-road mobile equipments and recreational vehicles except aircrafts, locomotives, and commercial marine vessels. The NONROAD model does not include commercial marine, locomotive, and airport emissions. Emissions for these three source categories are estimated using other EPA approved methods and guidance documents. The airport emissions are calculated using the Federal Aviation Administration (FAA) Emissions and Dispersion Modeling System (EDMS) version 5.1. The locomotive emission estimates for Texas are based on specific fuel usage data derived from railway segment level gross ton mileage activity (line haul locomotives) and hours of operation (yard locomotives) provided directly by the Class I railroad companies operating in Texas. Data captured from the Automatic Identification System (AIS) program is applied to the latest emission

factors to quantify emissions from the commercial marine vessels.

2.5 ON-ROAD MOBILE SOURCES

On-road mobile sources consist of automobiles, trucks, motorcycles, and other motor vehicles traveling on public roadways. Combustion-related emissions are estimated for vehicle engine exhaust, and evaporative hydrocarbon emissions are estimated for the fuel tank and other evaporative leak sources on the vehicle. To estimate emissions, on-road mobile emission factors are multiplied by the corresponding activity level. Emission factors have been developed using the newest version of the EPA's mobile emissions factor model, MOBILE6.2. Various inputs are provided to the model to simulate the vehicle fleet driving in each particular nonattainment area. Inputs used to develop localized emission factors include vehicle speeds, vehicle age distributions, local meteorological conditions, type of inspection and maintenance (I/M) program in place, and local fuel properties. To complete the emissions estimate, the emission factors calculated by the MOBILE6.2 model must be multiplied by the local vehicle activity and the vehicle miles traveled (VMT). The level of vehicle travel activity is developed using localized travel demand models run by the Texas Transportation Institute (TTI), Texas Department of Transportation (TxDOT), or regional Metropolitan Planning Organizations (MPO). The travel demand models have been validated using a large number of ground counts from traffic counters placed in various locations throughout Texas. Estimates of VMT are often calibrated to outputs from the federal Highway Performance Monitor System, which is a model validated using a different set of traffic counters. Finally, roadway speeds are calculated by a post-processor to the travel demand model. The roadway speeds are needed to select the appropriate MOBILE6.2 emission factors.

CHAPTER 3: PHOTOCHEMICAL MODELING

Only minor changes have been made to this chapter. The complete text has been provided for convenience.

The Texas Commission on Environmental Quality (TCEQ) is not providing any modeling for this Clean Air Interstate Rule (CAIR) State Implementation Plan (SIP) revision. The United States Environmental Protection Agency (EPA) conducted air quality modeling using the Community Multi-Scale Air Quality (CMAQ) model in conjunction with 2001 meteorological data for simulating fine particulate matter of 2.5 microns and less ($PM_{2.5}$) concentrations and associated visibility effects, as well as using the Comprehensive Air Model with Extensions (CAMx) model with meteorological data for three episodes in 1995 to simulate eight-hour ozone concentrations. The CAIR air quality modeling information, modeling analysis techniques, model evaluation, and results for the $PM_{2.5}$ and eight-hour ozone modeling are available in the EPA docket for the CAIR, Docket ID No. OAR-2003-0053.

Texas Health & Safety Code, § 382.0173 requires that the TCEQ adopt and implement the EPA model cap and trade program, and states have no authority to adjust the nitrogen oxides and sulfur dioxide emission budgets under the CAIR, no additional modeling is necessary to implement CAIR in Texas.

CHAPTER 4: DATA ANALYSIS

Only minor changes have been made to Chapter 4. The complete text has been provided for convenience.

The Texas Commission on Environmental Quality (TCEQ) is not providing specific data analysis for this Clean Air Interstate Rule (CAIR) State Implementation Plan (SIP) revision. The United States Environmental Protection Agency (EPA) conducted air quality modeling using the Community Multi-Scale Air Quality (CMAQ) model in conjunction with 2001 meteorological data for simulating fine particulate matter of 2.5 microns and less ($PM_{2.5}$) concentrations and associated visibility effects, as well as using the Comprehensive Air Model with Extensions (CAMx) model with meteorological data for three episodes in 1995 for simulating eight-hour ozone concentrations. The CAIR air quality modeling information, modeling analysis techniques, model evaluation, and results for the $PM_{2.5}$ and eight-hour ozone modeling are available in the EPA docket for the CAIR, Docket ID No. OAR-2003-0053.

Texas Health & Safety Code, § 382.0173 requires that the TCEQ adopt and implement the EPA model cap and trade program, and states have no authority to adjust the nitrogen oxides and sulfur dioxide emission budgets under the CAIR, so no additional data analysis is necessary to implement CAIR in Texas.

CHAPTER 5: REQUIRED CONTROL STRATEGY ELEMENTS

5.1 BACKGROUND

On May 12, 2005, the Clean Air Interstate Rule (CAIR) was published in the *Federal Register*. The rule required 28 eastern states and the District of Columbia to reduce sulfur dioxide (SO_2) and/or nitrogen oxides (NO_X) emissions, which are precursors of particulate matter of 2.5 microns and less ($PM_{2.5}$) and ozone. Twenty-five states[16] and the District of Columbia must reduce annual SO_2 and NO_X emissions to attain the $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS). Under CAIR, twenty-five states[17] and the District of Columbia, not including Texas, must reduce NO_X emissions for the purposes of attainment of the eight-hour ozone NAAQS. States were given the choice to use one of two compliance options from the United States Environmental Protection Agency (EPA): meet the state's emission budget by requiring electric generating units (EGU) to participate in an EPA-administered interstate cap and trade program; or meet an individual state emissions budget through measures of the state's choosing. The 79th Texas Legislature in 2005 passed House Bill (HB) 2481[18] in its Regular Session requiring the TCEQ to adopt the EPA-administered interstate cap and trade program by reference and stipulating specifications for NO_X allowance allocations and set-asides for NO_X emissions, as well as only requiring reductions associated with CAIR from new[19] and existing[20] EGUs.

The 80th Texas Legislature, 2007 Regular Session passed Senate Bill (SB) 1672[21] that requires the commission to adopt portions of the Clean Air Interstate Rule (CAIR) by reference and stipulates specifications for allocations and set-asides for CAIR NO_X allowances. Therefore, the TCEQ must participate in the EPA-administered interstate cap and trade program.

5.2 CONTROL STRATEGY - CAIR NO_X and SO_2 RULE CHANGES

The TCEQ elected to impose control measures on EGUs, and the commission imposed an annual NO_X mass emissions cap on all EGU sources in the state. As directed by HB 2481 and the subsequent SB 1672, the commission is, under 30 Texas Administrative Code (TAC) Chapter 101, Subchapter H, Division 7, incorporating 40 Code of Federal Regulations (CFR) Part 96, Subpart AA through Subpart II for NO_X and Subpart AAA through Subpart III for SO_2 by reference for the purpose of complying with the federal CAIR program.

In addition, the commission is specifying rules under 30 TAC Chapter 101, Subchapter H, Division 7 regarding the methodologies and procedures for determining each CAIR NO_X source's CAIR NO_X allocation in lieu of the CAIR NO_X allocation methodologies and procedures under 40 CFR Part 96,

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[16] Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New York, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

[17] Alabama, Arkansas, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin.

[18] Act of June 18, 2005, 79th Leg., R.S., HB. 2481, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources). See Appendix B.

[19] New EGU - Units commencing operation on or after January 1, 2001.

[20] Existing EGU - Units commencing operation before January 1, 2001.

[21] Act of May 10, 2007, 80th Leg., R.S., SB 1672, § 2 (codified at Tex. Health & Safety Code §382.0173, concerning Adoption of Rules Regarding Certain SIP Requirements and Standards of Performance for Certain Sources).

Subpart EE. The rules apply to any EGU that is a stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990, or the start-up of the unit's combustion chamber, a generator with nameplate capacity of more than 25 megawatt electrical (MWe) producing electricity for sale. For a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity and continues to qualify as a cogeneration unit, a cogeneration unit is a CAIR unit that serves at any time a generator with nameplate capacity of more than 25 MWe and supplies in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 megawatt hour (MWh), whichever is greater, to any utility power distribution system for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to CAIR starting on the day the unit first no longer qualifies as a cogeneration unit.

5.2.1 Interstate Cap and Trade Program for NO_X and SO_2

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

The EPA's CAIR model trading rule, 40 CFR Part 96, is a market-based cap and trade system designed to reduce the costs of complying with the new NO_X and SO_2 reduction requirements. The CAIR model rule designates respective budgets for annual NO_X and SO_2 emissions within each state to be applied to all fossil-fuel-fired boilers and turbines serving an electrical generator with a nameplate capacity greater than 25 MWe and producing electricity for sale. The model rule provides flexibility in complying with the NO_X and SO_2 reduction requirements through unrestricted banking of excess allowances and the trading of allowances between EGUs in Texas and other affected CAIR states under common caps. For example, EGUs in Texas will be allowed to trade NO_X allowances with other CAIR states participating in the CAIR annual NO_X trading program, while the trading of SO_2 allowances will be permissible with CAIR states participating in the CAIR SO_2 trading program or the Title IV SO_2 allowance trading program. Under the model rule, states are provided flexibility in the allocation methodology used to determine CAIR NOx allocations for each CAIR NOx unit. CAIR states are then responsible for submitting the CAIR NOx allowance allocations to the EPA for recordation.

5.2.2 CAIR NO_X Annual Trading Budget

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

30 TAC § 101.503 specifies that the NOx trading budget for annual allocations of CAIR NOx allowances for each control period in 2009 through 2014, and for 2015 and thereafter, will be equivalent to the tons per year (tpy) of NO_X emissions listed for Texas in the state trading budget under 40 CFR § 96.140. As promulgated on May 12, 2005, 40 CFR § 96.140 provides Texas with an annual NO_X trading budget of 181,014 tpy for each control period in 2009 through 2014, and 150,845 tpy for each control period in 2015 and thereafter.

5.2.3 CAIR NO_X Allocation Methodology

In 2007, the 80th Texas Legislature passed SB 1672, allowing the TCEQ to incorporate revisions to the federal CAIR that the EPA finalized since the initial adoption of the CAIR SIP revision by the commission on July 12, 2006, as well as revisions to the NO_X allocation methodology. SB 1672 contains provisions relating to correcting the number of minimum periods specified for NO_X allocation adjustments that were directed by HB 2481. HB 2481 revised the baseline of units commencing

operation before January 1, 2001, by reviewing heat-input data every five years by looking back one through five of the previous seven years. However, the seven-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of each control period. Therefore, the number of control periods was changed from seven to nine in SB 1672. SB 1672 shifted the allocation update from 2016 to 2018.

Because of this legislative change in SB 1672, units commencing operation on or after January 1, 2001, with five or more years of operation will receive allowances from the general pool (90.5 percent of the Texas NO_X trading budget) in the years 2016 and 2017. However, beginning in 2018 each unit's baseline heat input will be based on the average of the highest three years from control periods one through five of the preceding nine control periods. In accordance with SB 1672, this baseline readjustment will happen every five years. Therefore, the number of NO_X allowances would not fluctuate and would remain constant for five years.

The methodology described in 30 TAC § 101.506 is used to allocate CAIR NO_X allowances for each CAIR NO_X unit. For units commencing operation before January 1, 2001, CAIR NO_X allowances will be allocated based on a three-year average historical heat input, in million British thermal units (MMBtu), adjusted for the type of fuel burned. For each control period in 2009 through 2017, the baseline heat input for units commencing operation before January 1, 2001, will be the average of the three highest amounts of the unit's historical heat input, adjusted for fuel type, from calendar years 2000 through 2004. In accordance with SB 1672, beginning with the 2018 control period and for the control period beginning every five years thereafter, the baseline heat input for units commencing operation before January 1, 2001, will be adjusted to reflect the average of the three highest amounts of the unit's control period heat input, adjusted for fuel type, from control periods one through five of the previous nine control periods. The fuel type adjustment will be performed by multiplying a unit's baseline heat input by the following: 90 percent for coal-fired; 50 percent for natural gas-fired; and 30 percent for all other fossil fuels.

For units commencing operation on or after January 1, 2001, CAIR NO_X allowances will be allocated for each control period in 2009 through 2014 only from the NO_X new unit set-aside (9.5 percent of the Texas NO_X trading budget) identified under 30 TAC §101.503(b) and as prescribed by the Texas Legislature in HB 2481. A unit commencing operation on or after January 1, 2001, will no longer be eligible for CAIR NO_X allowances from the new unit set-aside once a baseline heat input is established for the unit and the unit is receiving allowances from the general pool. The baseline heat input will be the average of the three highest amounts of the unit's total converted control period heat input from the first five years of commercial operation for the 2015, 2016, and 2017 control periods. Table 5-1: *CAIR NO_X Units Qualifying for an Allocation of CAIR NO_X Allowances from the General Pool for the 2015, 2016, and 2017 Control Periods* lists all qualifying CAIR NO_X units within the general pool during the 2015, 2016, and 2017 control periods.

Table 5-1: CAIR NO_X Units Qualifying for an Allocation of CAIR NO_X Allowances from the General Pool for the 2015, 2016, and 2017 Control Periods

CAIR NO_X Units Qualifying for an Allocation of 2015 CAIR NO_X Allowances from the General NO_X Trading Budget		
CAIR NO_X Units:	**Baseline Heat Input Determined From:**	**Data Used from Each Control Period for Determining the Baseline:**
Commencing operation before January 1, 2001	2000 through 2004	Heat Input
Commencing operation in 2001	First Five Fears of Commercial Operation (Generally 2001 through 2005)	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2002	First Five Years of Commercial Operation (Generally 2002 through 2006)	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2003	First Five Years of Commercial Operation (Generally 2003 through 2007)	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2004	First Five Years of Commercial Operation (Generally 2004 through 2008)	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2005	First Five Years of Commercial Operation (Generally 2005 through 2009)	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2006	First Five Years of Commercial Operation (Generally 2006 through 2010)	Gross Electrical Output and/or Heat Energy of the Steam Produced
CAIR NO_X Units Qualifying for an Allocation of 2016 CAIR NO_X Allowances from the General NO_X Trading Budget		
CAIR NO_X Units:	**Baseline Heat Input Determined From:**	**Data Used from Each Control Period for Determining the Baseline:**
Commencing operation before 2007	Same baseline heat input used for the 2015 control period	Same data used for the 2015 control period
Commencing operation in 2007	First Five Years of Commercial Operation (Generally 2007 through 2011)	Gross Electrical Output and/or Heat Energy of the Steam Produced
CAIR NO_X Units Qualifying for an Allocation of 2017 CAIR NO_X Allowances from the General NO_X Trading Budget		
CAIR NO_X Units:	**Baseline Heat Input Determined From:**	**Data Used from Each Control Period for Determining the Baseline:**
Commencing operation before 2007	Same baseline heat input used for the 2015 control period	Same data used for the 2015 control period
Commencing operation in 2007	Same baseline heat input used for the 2016 control period	Same data used for the 2016 control period
Commencing operation in 2008	First five year of commercial operation (Generally 2008 through 2012)	Gross Electrical Output and/or Heat Energy of the Steam Produced

Beginning with the 2018 control period and for the control period beginning every five years thereafter, the baseline heat input for units commencing operation on or after January 1, 2001, will be adjusted to reflect the average of the three highest amounts of the unit's total converted control period heat input from control periods one through five of the previous nine control periods. In calculating a unit's converted control period heat input on a modified output basis, the unit's gross electrical output will be multiplied by a heat rate conversion factor of 7,900 British thermal unit per kilowatt (Btu/kWh) for coal-fired units and 6,675 Btu/kWh for natural gas- and oil-fired units. For cogeneration units, the converted heat input will be calculated by converting the available thermal output, in British thermal units, of useable steam to an equivalent heat input by dividing the thermal output by a general boiler/heat

exchanger efficiency of 80 percent. For combustion turbine cogeneration units, the converted heat input will be calculated by first converting the available thermal output of useable steam from the heat recovery steam generator or heat exchanger to an equivalent heat input by dividing the thermal output by a general boiler/heat exchanger efficiency of 80 percent. Then, the electrical generation from the combustion turbine must be added after conversion to an equivalent heat input by multiplying the electrical output by 3,413 Btu/kWh. The sum will yield the total equivalent heat input for the combustion turbine cogeneration unit. Table 5-2: *CAIR NO_X Units Qualifying for an Allocation of CAIR NO_X Allowances from the General Pool for the 2018 through 2022 Control Periods* lists all qualifying CAIR NO_X units within the general pool during the 2018 through the 2022 control periods.

Table 5-2: CAIR NO_X Units Qualifying for an Allocation of CAIR NO_X Allowances from the General Pool for the 2018 through 2022 Control Periods

CAIR NO_X Units Qualifying for an Allocation of 2018 through 2022 CAIR NO_X Allowances from the General NO_X Trading Budget		
CAIR NO_X Units:	**Baseline Heat Input Determined From:**	**Data Used from Each Control Period for Determining the Baseline:**
Commencing operation before January 1, 2001	2009 through 2013	Heat Input
Commencing operation in 2001	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2002	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2003	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2004	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2005	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2006	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2007	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2008	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced
Commencing operation in 2009	Commercial Operation Data 2009 through 2013	Gross Electrical Output and/or Heat Energy of the Steam Produced

The allocation methodology prescribed in House Bill 2481, 2005 Texas Legislature, Regular Session, and SB 1672, 2007 Texas Legislature, Regular Session, distributes 90.5 percent of the Texas NO_X trading budget to each CAIR NO_X unit with a baseline heat input determined under § 101.506(a) or (b)(2) or (3) in proportion to each CAIR NO_X unit's share of baseline heat input to the total baseline heat input for all CAIR NO_X units with a baseline heat input determined under § 101.506(a) or (b)(2) or (3). For units that commence operation on or after January 1, 2001, and that have not established a historical baseline heat input in accordance with § 101.506(b)(2) or (3), CAIR NO_X allowances are allocated from the new unit set-aside beginning with the later of the 2009 control period or the first control period after the control period in which the unit commences commercial operation. The allocation methodology requires the executive director to distribute CAIR NO_X allowances from the new unit set-aside upon receipt of a request from the CAIR-designated representative for the CAIR NO_X unit. Submittal of each request for a

CAIR NO_X allocation from the new unit set-aside will be required on or before May 1 of the first control period for which the request is being made and after the date on which the CAIR NO_X unit commences commercial operation. CAIR NO_X allowances requested from the new unit set-aside will not be allocated in excess of the unit's total tons per year of NO_X emissions reported to the EPA for the previous control period.

On or after May 1st of each control period, the executive director will review each CAIR NO_X allocation request, determine the sum of all CAIR NO_X allocation requests, and allocate CAIR NO_X allowances from the new unit set-aside for the control period. If the amount of CAIR NO_X allowances in the new unit set-aside is greater than or equal to the sum of all CAIR NO_X allowances requested, the executive director will allocate the amount of CAIR NO_X allowances requested. If the amount of CAIR NO_X allowances in the new unit set-aside is less than the sum of all CAIR NO_X allowances requested, the executive director will allocate CAIR NO_X allowances in proportion to the amount of CAIR NO_X allowances requested by a CAIR NO_X unit to the total amount of CAIR NO_X allowances requested by all CAIR NO_X units.

The allocation methodology will allow units commencing operation on or after January 1, 2001, to begin receiving allowances from the new unit set-aside for the control period immediately following the control period in which the unit commences commercial operation based on the unit's emissions reported for the previous control period. Therefore, a CAIR NO_X source operating a unit commencing operation on or after January 1, 2001, will be required to hold allowances covering the emissions from the unit for the control period in which the unit commences commercial operation but will not receive an allocation for that control period. CAIR NO_X allocations for this unit in subsequent control periods will continue to be based on the unit's emissions from the previous control period until the unit establishes a baseline in accordance with § 101.506(b)(2) or (3). All CAIR NO_X allocations under the allocation methodology will be rounded to the nearest whole allowance per unit. Allowances are only distributed in one ton increments.

Any unallocated CAIR NO_X allowances remaining in the new unit set-aside for a given control period will be distributed to CAIR NO_X units with a historical baseline heat input receiving an allocation from the general pool. Each unit in the general pool will receive an additional allocation proportional to the ratio of its original allocation to the general pool. The distribution is calculated by multiplying the amount of unallocated CAIR NO_X allowances remaining in the new unit set-aside by each CAIR NO_X unit's allocation determined under § 101.506(c), divided by 90.5 percent of the Texas NO_X trading budget, and rounded to the nearest whole allowance.

For the purposes of determining CAIR NO_X allocations, the following criteria are considered: a CAIR NO_X unit's control period heat input; fossil-fuel type status (coal-fired, natural gas-fired, or other type fossil-fuel-fired); and the total tons of NO_X emissions during a calendar year to be determined in accordance with 40 CFR Part 75, to the extent the unit was otherwise subject to those requirements for the year will be used. If a CAIR NO_X unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year, the unit's control period heat input, status fossil-fuel type, and total tons of NO_X emissions during a calendar year will be based on the best available data reported to the executive director.

5.2.4 CAIR NO_X Budget Set-Aside

SB 1672 requires that an amount of CAIR NO_X allowances equivalent to 9.5 percent of the Texas NO_X trading budget be set aside for new units. This new unit set-aside will equate to 17,196 tpy of CAIR NO_X

allowances for each control period in 2009 through 2014, and 14,330 tpy of CAIR NO_X allowances for each control period in 2015 and thereafter.

5.2.5 CAIR NO_X Allowance Compliance Supplement Pool (CSP)

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

Section 101.508 outlines the requirements for the allocation of additional CAIR NO_X allowances for the 2009 control period from the CSP for Texas provided under 40 CFR § 96.143. As promulgated on May 12, 2005, 40 CFR § 96.140 provides Texas with an additional 772 CAIR NO_X allowances under the CSP. The rule language allows the CSP allowances to be distributed to those CAIR NO_X units that achieve early NO_X reductions in 2007 and 2008 beyond any applicable state or federal emission limitation during those years. CAIR NO_X units seeking an additional allocation from the CSP for early NO_X reductions in 2007 and 2008 will be required to monitor and report the unit's NO_X emission rate and heat input in accordance with the continuous emissions monitoring and reporting requirements under 40 CFR Part 96, Subpart HH for the entire control period in which the early reductions are being generated. The CAIR-designated representative is required to submit to the executive director by July 1, 2009, a request for an allocation of CAIR NO_X allowances from the CSP in an amount not to exceed the sum of the CAIR NO_X unit's emission reductions, in tpy, during 2007 and 2008 that were not necessary to comply with any state or federal emission limitation applicable during those years.

In addition, the CSP provides for the allocation of additional CAIR NO_X allowances from the CSP for CAIR NO_X units of which compliance with the CAIR NO_X annual trading program in the 2009 control period would create undue risk to the reliability of electricity supply during 2009. The CAIR-designated representative is required to submit to the executive director by July 1, 2009, a request for an allocation of CAIR NO_X allowances from the CSP in an amount not to exceed the minimum amount of CAIR NO_X allowances necessary to remove the risk to the reliability of electricity supply. The CAIR-designated representative will be required to demonstrate that in the absence of the additional allocation to the unit, the unit's compliance with the CAIR NO_X annual trading program during the 2009 control period would create an undue risk to electric reliability during 2009. This demonstration is required to show that it would not be feasible to obtain a sufficient amount of electricity from other electric generation facilities or obtain a sufficient amount of CAIR NO_X allowances from the CSP by making early NO_X reductions in 2007 and 2008.

The executive director will review each request for an additional allocation from the CSP and allocate CAIR NO_X allowances for the 2009 control period to CAIR NO_X units regulated under a request. If the amount of CAIR NO_X allowances in the CSP is greater than or equal to the sum of all CAIR NO_X allowances requested, the executive director will allocate the amount of CAIR NO_X allowances requested. If the amount of CAIR NO_X allowances in the CSP is less than the sum of all CAIR NO_X allowances requested, the executive director will allocate to each CAIR NO_X unit regulated under a request an amount of CAIR NO_X allowances in proportion to the amount of CAIR NO_X allowances requested by a CAIR NO_X unit to the total amount of CAIR NO_X allowances requested by all CAIR NO_X units. The executive director will determine and submit to the EPA by November 30, 2009, the CAIR NO_X allocations from the CSP.

5.2.6 CAIR Annual SO_2 Budget

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

The commission has incorporated by reference in § 101.502 the requirements of 40 CFR Part 96, Subparts AAA-III that contains the SO_2 budget limits for Texas. The Texas CAIR SO_2 emission budget is specified in 40 CFR § 51.124 as 320,946 tpy for the 2010 through 2014 period and 224,662 tpy for 2015 and thereafter.

5.2.7 CAIR SO_2 Allocations

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

CAIR SO_2 allocations will be distributed by the EPA based on the CAIR source's Title IV SO_2 allowance allocation. The EPA will establish CAIR compliance accounts for each CAIR source and maintain an allowance tracking system to record the deposit, transfer, and deduction for compliance of all CAIR allowances. The TCEQ incorporated by reference in § 101.502 the requirements of 40 CFR Part 96, Subparts AAA-III, which relate to the CAIR SO_2 program.

5.2.8 Authorized Account Representatives for CAIR NO_X and SO_2 Program

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

Each CAIR NO_X source, including all CAIR NO_X units at the source, will have only one CAIR-designated representative with regard to all matters under the CAIR NO_X Annual Trading program concerning the source or any CAIR NO_X unit at the source.

The CAIR-designated representative is authorized by the owners and operators of the source and all such units at the source in accordance with 40 CFR Part 96, Subparts BB and II, to represent and legally bind each owner and operator in matters pertaining to the CAIR NO_X Annual Trading program. If the CAIR NO_X source is also a CAIR SO_2 source, this person shall be the same person as the CAIR-designated representative under the CAIR SO_2 Trading program. If the CAIR NO_X source is also subject to the Acid Rain program, this person shall be the same person as the designated representative under the Acid Rain program.

5.2.9 CAIR NO_X and CAIR SO_2 Allowance Tracking System

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

The commission has incorporated by reference 40 CFR Part 96, Subparts FF and FFF regarding CAIR NO_X and SO_2 Allowance Tracking Systems. The NO_X and SO_2 Allowance Tracking Systems are controlled and operated by the EPA. Compliance accounts for CAIR NO_X and SO_2 sources are required for the purpose of holding CAIR NO_X and SO_2 allowances.

5.2.10 CAIR NO_X and CAIR SO_2 Allowance Transfers

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

A CAIR-authorized account representative seeking recordation of CAIR NO_X or SO_2 allowance transfers shall submit the request to the EPA. The NO_X and SO_2 allowance transfer must include the following elements: the account numbers for both the transferor and transferee accounts; the serial number for each CAIR NO_X or SO_2 allowance in the transferor account that is to be transferred; and the name and signature of the CAIR-authorized account representative of the transferor account and the date signed. 40 CFR Part 96 Subparts GG and GGG have been incorporated by reference in Chapter 101, Subchapter H, Division 7, to meet the requirements of NO_X and SO_2 allowance transfers, respectively.

5.2.11 CAIR NO_X and CAIR SO_2 Permits

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

All elements of the CAIR NO_X Annual Trading program and CAIR SO_2 Trading program are required to be federally enforceable through the issuance of a CAIR permit as a complete and separable portion of the CAIR source's Title V permit. Submission of CAIR permit applications are dictated by 40 CFR Part 96 Subpart CC for NO_X and 40 CFR Part 96, Subpart CCC for SO_2. The TCEQ has incorporated requirements for revising Title V permits in 30 TAC Chapter 122.

5.2.12 Opt-In Requirements for NO_X and SO_2 Annual Trading Programs

(This subsection has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

The CAIR rule includes a provision that other units may opt in to the CAIR program under 40 CFR Part 96, Subpart II for NO_X and Subpart III for SO_2. A CAIR NO_X opt in unit must be a unit that is located in Texas; not considered a CAIR NO_X unit; is not covered by a retired unit exemption under 40 CFR § 72.8; has or is required or qualified to have a Title V operating permit or other federally enforceable permit; and vents all of its emissions to a stack and meets the monitoring, recordkeeping, and reporting requirements of 40 CFR Part 96 Subpart HH. Units electing to opt-in to the CAIR NO_X Annual Trading program will be required to monitor and report the NO_X emission rate and heat input of the unit in accordance with the monitoring and reporting requirements of Subpart HH for the entire control period prior to the date on which the unit elects to enter the CAIR NO_X Annual Trading program. The baseline heat input and baseline emission rate for each CAIR NO_X opt in unit will depend upon the number of control periods the unit has monitored and reported heat input and emission rate data in accordance with Subpart HH. If the unit has monitored and reported for only one control period, the baseline heat input and emission rate will be the unit's total heat input and NO_X emission rate for the control period immediately preceding the date on which the unit elects to opt-in. For units that have monitored and reported for more than one control period, the baseline heat input and emission rate will be the average of the most recent three-year period. The opt-in provisions of Subpart II allow opt-in units to choose from two different allocation methods for receiving an allocation of CAIR NO_X allowances. The general approach will allocate CAIR NO_X allowances to opt-in units at 70 percent of their baseline NO_X emission rate with no additional reductions required after the 2009 control period. An alternative approach will allocate CAIR NO_X allowances at the baseline levels for the 2009 through 2014 control periods but require additional reductions starting in 2015. The CAIR NO_X allowance allocation for each control

period beginning in 2015, and thereafter, will be based on a NO_X emission rate equal to the lesser of 0.15 lb of NO_X/million British thermal unit (MMBtu), the unit's baseline emission rate, or the most stringent state or federal NO_X emission limit applicable for any time during the applicable control period. Units may elect to opt into the CAIR NO_X Annual Trading program without electing to opt in to the CAIR SO_2 Trading program and may withdraw from participation in the CAIR NO_X Annual Trading program after five years of participation.

Subpart III describes the opt-in provisions for the CAIR SO_2 Trading program. The opt-in provisions apply to a unit that is not already a CAIR SO_2 unit under 40 CFR § 96.204 or covered by a retired unit exemption; has or is qualified to have a Title V operating permit; vents all emissions to a stack; and can meet the monitoring, recordkeeping, and reporting requirements of 40 CFR Part 96, Subpart HHH. CAIR SO_2 opt in units will be required to apply for and obtain a CAIR permit as prescribed under Subpart CCC. Units electing to opt-in to the CAIR SO_2 Trading program will be required to monitor and report the SO_2 emission rate and heat input of the unit in accordance with the monitoring and reporting requirements of Subpart HHH for the entire control period prior to the date on which the unit elects to enter the CAIR SO_2 Trading program. The baseline heat input and baseline emission rate for each CAIR SO_2 opt-in unit will be dependent upon the number of control periods the unit has monitored and reported heat input and emission rate data in accordance with Subpart HHH. If the unit has monitored and reported for only one control period, the baseline heat input and emission rate will be the unit's total heat input and SO_2 emission rate for the control period immediately preceding the date on which the unit elects to opt in. For units that have monitored and reported for more than one control period, the baseline heat input and emission rate will be the average of the most recent three-year period. The opt-in provisions of Subpart III allow opt-in units to choose from two different allocation methods for receiving an allocation of CAIR SO_2 allowances. The general approach will allocate CAIR SO_2 allowances to opt-in units at 70 percent of their baseline SO_2 emission rate with no additional reductions required after the 2010 control period. An alternative approach would allocate CAIR SO_2 allowances at the baseline levels for the 2010 through 2014 control periods but require greater reductions starting in 2015. The CAIR SO_2 allowance allocation for each control period beginning in 2015, and thereafter, will be based on a SO_2 emission rate equal to the lesser of the unit's baseline emission rate multiplied by 10 percent or the most stringent state or federal SO_2 emission limit applicable for any time during the applicable control period. Units may elect to opt in to the CAIR SO_2 Trading program without electing to opt-in to the CAIR NO_X Annual Trading program and may withdraw from participation in the CAIR SO_2 Trading program after five years of participation.

5.3 ENFORCEMENT

(This section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

Requirements for allowance tracking and deductions for excess emissions are discussed in Section 5.2.10 CAIR NO_X and CAIR SO_2 Allowance Transfers, and requirements relating to the monitoring, recordkeeping, and reporting certifications requirements are discussed below in Section 5.4 MONITORING AND REPORTING REQUIREMENTS. CAIR sources will be required, under the model rule, to demonstrate compliance through the installation and operation of continuous emissions monitoring systems as required under 40 CFR Part 75.

5.4 MONITORING AND REPORTING REQUIREMENTS

(This section has not been changed. It has been included in the current CAIR SIP revision proposal for convenience.)

40 CFR § 51.123(I) requires that the state provide for monitoring the status of compliance with any control measures. To satisfy this requirement, the commission has incorporated by reference in §101.502 the obligations in 40 CFR Part 96, Subparts HH and HHH that require CAIR NO_X and CAIR SO_2 sources to comply with the monitoring, recordkeeping, and reporting provisions of the model rule, as well as the applicable sections of 40 CFR Part 75, Subpart H. All affected sources will be required to monitor and report their emissions in accordance with 40 CFR Part 75. In addition, the model rule and 40 CFR Part 75 provide for certification of the monitoring systems to ensure accurate representation of emissions. Sources with monitoring systems already certified under 40 CFR Part 75 will not be required to recertify those same monitoring systems. However, owners or operators of CAIR subject units that have previously approved alternative monitoring petitions under 40 CFR Part 75 will need to resubmit the petitions to the EPA in accordance with 40 CFR § 96.171(c) and § 96.271(c). Source information management, emissions data reporting, and allowance trading will be accomplished using on-line systems similar to those currently used for the Title IV Acid Rain and NO_X SIP Call programs.

CHAPTER 6: FUTURE ATTAINMENT PLANS

The United States Environmental Protection Agency (EPA) is currently in the process of revising the Clean Air Interstate Rule (CAIR) to address the decisions of the United States Court of Appeals District of Columbia Circuit (Appeals Court). The July 11, 2008, Appeals Court opinion (No. 05-1244) vacated CAIR and the CAIR Federal Implementation Plan (FIP) and remanded it back to the EPA in its entirety. However, on December 23, 2008, the Appeals Court issued a revised opinion to remand, without vacating, CAIR to the EPA. Therefore, CAIR will remain in effect while the EPA analyzes data and conducts rulemaking to modify the program to comply with the Appeal's Court July 2008 opinion. The Appeals Court declined to impose a schedule by which the EPA must complete the rulemaking, but reminded the EPA that the Appeals Court does ". . . not intend to grant an indefinite stay of the effectiveness of this Court's decision."

APPENDIX A

AN ACT

relating to nitrogen oxide allowance allocation adjustments and the incorporation of modifications to federal rules under the state implementation plan.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subsections (b), (c), and (e), Section 382.0173, Health and Safety Code, are amended to read as follows:

(b) The commission may require emissions reductions in conjunction with implementation of the rules adopted under Subsection (a) only for electric generating units. The commission shall make permanent allocations that are reflective of the allocation requirements of 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of Part 60, as applicable, at no cost to units as defined in 40 C.F.R. Sections [~~Section~~] 51.123 and 60.4102 using the United States Environmental Protection Agency's allocation method as specified by 40 C.F.R. Section 60.4142(a)(1)(i)[~~, as issued by that agency on May 12, 2005,~~] or 40 C.F.R. Section 96.142(a)(1)(i)[~~, as issued by that agency on May 18, 2005~~], as applicable, with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c). The commission shall maintain a special reserve of allocations for new units commencing operation on or after January 1, 2001, as defined by 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and

40 C.F.R. Subpart HHHH of Part 60, as applicable, with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c).

(c) Additional requirements regarding NOx allocations:

(1) The commission shall maintain a special reserve of allocations for nitrogen oxide of 9.5 percent for new units. Beginning with the 2015 control period, units shall be considered new for each control period in which they do not have five years of operating data reported to the commission prior to the date of allocation for a given control period. Prior to the 2015 control period, units that commenced operation on or after January 1, 2001, will receive NOx allocations from the special reserve only.

(2) Nitrogen oxide allowances shall be established for the 2009-2014 control periods for units commencing operation before January 1, 2001, using the average of the three highest amounts of the unit's adjusted control period heat input for 2000 through 2004, with the adjusted control period heat input for each year calculated as follows:

(A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90 percent;

(B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50 percent; and

(C) if the fossil fuel fired unit is not subject to Paragraph [~~Subparagraph~~] (A) or (B) of this subdivision [~~paragraph~~], the unit's control period heat input for such year is

multiplied by 30 percent.

(3) Before the allocation date specified by EPA for the control period beginning January 1, 2018 [~~2016~~], and every five years thereafter, the commission shall adjust the baseline for all affected units using the average of the three highest amounts of the unit's adjusted control period heat input for periods one through five of the preceding nine [~~seven~~] control periods, with the adjusted control period heat input for each year calculated as follows:

(A) for units commencing operation before January 1, 2001:

(i) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90 percent;

(ii) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50 percent; and

(iii) if the fossil fuel fired unit is not subject to Subparagraph (i) or (ii) [~~Subdivision (3)(A)(i) or (3)(A)(ii)~~] of this paragraph [~~subparagraph~~], the unit's control period heat input for such year is multiplied by 30 percent; and[~~.~~]

(B) for units commencing operation on or after January 1, 2001, in accordance with the formulas set forth by USEPA in 40 C.F.R. 96.142 with any corrections to this section that may be issued by USEPA prior to the allocation date.

(e) In adopting rules under Subsection (a), the commission shall incorporate any modifications to the federal rules cited in

this section that result from:

(1) a request for rehearing regarding those rules that is filed with the United States Environmental Protection Agency;

(2) [~~or from~~] a petition for review of those rules that is filed with a court; or

(3) a final rulemaking action of the United States Environmental Protection Agency.

SECTION 2. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2007.

S.B. No. 1672

David Dewhurst
President of the Senate

Jim Craddick
Speaker of the House

I hereby certify that S.B. No. 1672 passed the Senate on April 12, 2007, by the following vote: Yeas 31, Nays 0.

Patsy Spaw
Secretary of the Senate

I hereby certify that S.B. No. 1672 passed the House on April 27, 2007, by the following vote: Yeas 133, Nays 0, two present not voting.

Robert Haney
Chief Clerk of the House

Approved:

10 MAY '07
Date

Rick Perry
Governor

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
6:20 PM O'CLOCK

MAY 10 2007

Roger Williams

APPENDIX B

CHAPTER 1125

H.B. No. 2481

AN ACT

relating to air contaminant emissions reductions, including the continuation and provisions of the Texas emissions reduction plan and the use of money currently dedicated to the Texas emissions reduction plan fund.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 382.0172(c), Health and Safety Code, is amended to read as follows:

(c) The commission may authorize or allow substitution of emissions reductions under Subsection (b) only if:

(1) reductions in emissions of one air contaminant for which the area has been designated as nonattainment are substituted for reductions in emissions of another air contaminant for which the area has been designated as nonattainment; or [~~and~~]

(2) the commission finds that the substitution will clearly result in greater health benefits for the community as a whole than would reductions in emissions at the original facility.

SECTION 2. Subchapter B, Chapter 382, Health and Safety Code, is amended by adding Section 382.0173 to read as follows:

Sec. 382.0173. ADOPTION OF RULES REGARDING CERTAIN STATE IMPLEMENTATION PLAN REQUIREMENTS AND STANDARDS OF PERFORMANCE FOR CERTAIN SOURCES. (a) The commission shall adopt rules to comply with Sections 110(a)(2)(D) and 111(d) of the federal Clean Air Act (42 U.S.C. Sections 7410 and 7411). In adopting the rules, at a

minimum the commission shall adopt and incorporate by reference 40 C.F.R. Subparts AA through II and Subparts AAA through III of Part 96 and 40 C.F.R. Subpart HHHH of Part 60. The commission shall adopt a state implementation plan in accordance with the rules and submit the plan to the United States Environmental Protection Agency for approval according to the schedules adopted by that agency.

(b) The commission may require emissions reductions in conjunction with implementation of the rules adopted under Subsection (a) only for electric generating units. The commission shall make permanent allocations that are reflective of the allocation requirements of 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of Part 60, as applicable, at no cost to units as defined in 40 C.F.R. Section 51.123 and 60.4102 using the United States Environmental Protection Agency's allocation method as specified by Section 60.4142(a)(1)(i), as issued by that agency on May 12, 2005, or 40 C.F.R. Section 96.142(a)(1)(i), as issued by that agency on May 18, 2005, as applicable with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c). The commission shall maintain a special reserve of allocations for new units commencing operation on or after January 1, 2001, as defined by 40 C.F.R. Subparts AA through HH and Subparts AAA through HHH of Part 96 and 40 C.F.R. Subpart HHHH of Part 60, as applicable with the exception of nitrogen oxides which shall be allocated according to the additional requirements of Subsection (c).

(c) Additional requirements regarding NOx allocations:

(1) The commission shall maintain a special reserve of allocations for nitrogen oxide of 9.5 percent for new units. Beginning with the 2015 control period, units shall be considered new for each control period in which they do not have five years of operating data reported to the commission prior to the date of allocation for a given control period. Prior to the 2015 control period, units that commenced operation on or after January 1, 2001, will receive NOx allocations from the special reserve only.

(2) Nitrogen oxide allowances shall be established for the 2009-2014 control periods for units commencing operation before January 1, 2001, using the average of the three highest amounts of the unit's adjusted control period heat input for 2000 through 2004, with the adjusted control period heat input for each year calculated as follows:

(A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90 percent;

(B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50 percent; and

(C) if the fossil fuel fired unit is not subject to Subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30 percent.

(3) Before the allocation date specified by EPA for the control period beginning January 1, 2016, and every five years thereafter, the commission shall adjust the baseline for all

affected units using the average of the three highest amounts of the unit's adjusted control period heat input for periods one through five of the preceding seven control periods, with the adjusted control period heat input for each year calculated as follows:

(A) for units commencing operation before January 1, 2001:

(i) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90 percent;

(ii) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50 percent; and

(iii) if the fossil fuel fired unit is not subject to Subdivision (3)(A)(i) or (3)(A)(ii) of this subparagraph, the unit's control period heat input for such year is multiplied by 30 percent.

(B) for units commencing operation on or after January 1, 2001, in accordance with the formulas set forth by USEPA in 40 C.F.R. 96.142 with any corrections to this section that may be issued by USEPA prior to the allocation date.

(d) This section applies only while the federal rules cited in this section are enforceable and does not limit the authority of the commission to implement more stringent emissions control requirements.

(e) In adopting rules under Subsection (a), the commission shall incorporate any modifications to the federal rules cited in this section that result from a request for rehearing regarding

those rules that is filed with the United States Environmental Protection Agency or from a petition for review of those rules that is filed with a court.

(f) The commission shall take all reasonable and appropriate steps to exclude the West Texas Region and El Paso Region, as defined by Section 39.264(g), Utilities Code, from any requirement under, derived from, or associated with 40 C.F.R. Sections 51.123, 51.124, and 51.125, including filing a petition for reconsideration with the United States Environmental Protection Agency requesting that it amend 40 C.F.R. Sections 51.123, 51.124, and 51.125 to exclude such regions. The commission shall promptly amend the rules it adopts under Subsection (a) of this section to incorporate any exclusions for such regions that result from the petition required under this subsection.

(g) The commission shall study the availability of mercury control technology. The commission shall also examine the timeline for implementing the reductions required under the federal rules, the cost of additional controls both to the plant owners and consumers, and the fiscal impact on the state of higher levels of mercury emissions between 2005 and 2018, and consider the impact of trading on local communities. The commission shall report its findings by September 1, 2006.

SECTION 3. Section 386.002, Health and Safety Code, is amended to read as follows:

Sec. 386.002. EXPIRATION. This chapter expires August 31, 2010 [~~2008~~].

SECTION 4. Section 386.053(c), Health and Safety Code, is

amended to read as follows:

(c) The commission shall make draft guidelines and criteria available to the public and the United States Environmental Protection Agency before the 30th [~~45th~~] day preceding the date of final adoption and shall hold at least one public meeting to consider public comments on the draft guidelines and criteria before final adoption. The public meeting shall be held in the affected state implementation plan area, and if the guidelines affect more than one state implementation plan area, a public meeting shall be held in each affected state implementation plan area affected by the guidelines.

SECTION 5. Sections 386.058(b) and (e), Health and Safety Code, are amended to read as follows:

(b) The governor shall appoint to the advisory board:

(1) a representative of the trucking industry;

(2) a representative of the air conditioning manufacturing industry;

(3) a representative of the electric utility industry;

(4) a representative of regional transportation; and

(5) a representative of the nonprofit organization described by Section 386.252(a)(2) [~~the Texas Council on Environmental Technology~~].

(e) Appointed members of the advisory board serve staggered four-year [~~two-year~~] terms, with the [~~. The~~] terms of seven or eight appointed members expiring [~~expire~~] February 1 of each [~~even-numbered year. The terms of eight appointed members expire February 1 of each~~] odd-numbered year. An appointed member may be

reappointed to a subsequent term.

SECTION 6. Section 386.102, Health and Safety Code, is amended by adding Subsection (e) to read as follows:

(e) To improve the success of the program the commission:

(1) shall establish cost-effective limits for grants awarded under the program to an owner or operator of a locomotive or marine vessel that are lower than the cost-effectiveness limits applied to other emissions reductions grants;

(2) shall determine the maximum amount of reductions available from the locomotive and marine sectors and develop strategies to facilitate the maximum amount of reductions in these sectors; and

(3) shall include in the report required by Section 386.057(b) that is due not later than December 1, 2006, an analysis of the cost-effectiveness of the grants in these sectors.

SECTION 7. Section 386.111(a), Health and Safety Code, is amended to read as follows:

(a) The commission shall review an application for a grant for a project authorized under this subchapter, including an application for a grant for an infrastructure project, immediately on receipt of the application. If the commission determines that an application is incomplete, the commission shall notify the applicant[~~, not later than the 15th working day after the date on which the commission received the application,~~] with an explanation of what is missing from the application. The commission shall [~~record the date and time of receipt of each application the commission determines to be complete and shall~~] evaluate the

completed application according to the appropriate project criteria. Subject to available funding, the commission shall make a final determination on an application as soon as possible [~~and not later than the 60th working day after the date the application is determined to be complete~~].

SECTION 8. Section 386.116(d), Health and Safety Code, is amended to read as follows:

(d) The [~~On or before December 1 of each even-numbered year, the~~] commission shall include in the biennial plan report required by Section 386.057(b) a report of commission actions and results under this section [~~to the governor, lieutenant governor, and speaker of the house of representatives~~].

SECTION 9. Subchapter C, Chapter 386, Health and Safety Code, is amended by adding Section 386.117 to read as follows:

Sec. 386.117. REBATE GRANTS. (a) The commission shall adopt a process for awarding grants under this subchapter in the form of rebates to streamline the grant application, contracting, reimbursement, and reporting processes for certain projects. The process adopted under this section must:

(1) designate certain types of projects, such as repowers, replacements, and retrofits, as eligible for rebates;

(2) project standardized oxides of nitrogen emissions reductions for each designated project type;

(3) assign a standardized rebate amount for each designated project type;

(4) allow for processing rebates on an ongoing first-come, first-served basis; and

(5) consolidate, simplify, and reduce the administrative work for applicants and the commission associated with grant application, contracting, reimbursement, and reporting processes for designated project types.

(b) The commission may limit or expand the designated project types as necessary to further the goals of the program.

(c) The commission may award rebate grants as a pilot project for a specific region or may award the grants statewide.

(d) The commission may administer the rebate grants or may designate another entity to administer the grants.

SECTION 10. Section 386.251(c), Health and Safety Code, is amended to read as follows:

(c) The fund consists of:

(1) the amount of money deposited to the credit of the fund [~~contributions, fees, and surcharges~~] under:

(A) Section 386.056;

(B) Sections 151.0515 and 152.0215, Tax Code; and

(C) Sections 501.138, 502.1675, and 548.5055 [~~and 548.256(c)~~], Transportation Code; and

(2) grant money recaptured under Section 386.111(d).

SECTION 11. Section 386.252(a), Health and Safety Code, is amended to read as follows:

(a) Money in the fund may be used only to implement and administer programs established under the plan and shall be allocated as follows:

(1) for the diesel emissions reduction incentive program, 87.5 percent of the money in the fund, of which not more

than 10 percent may be used for on-road diesel purchase or lease incentives;

(2) for the new technology research and development program, 9.5 percent of the money in the fund, of which up to $250,000 is allocated for administration, up to $200,000 is allocated for a health effects study, $500,000 is to be deposited in the state treasury to the credit of the clean air account created under Section 382.0622 to supplement funding for air quality planning activities in affected counties, [~~and~~] not less than 20 percent is to be allocated each year to support research related to air quality for the Houston-Galveston-Brazoria and Dallas-Fort Worth nonattainment areas by a nonprofit organization based in Houston, and the balance is to be allocated each year to that nonprofit organization based in Houston to be used to implement and administer the new technology research and development program under a contract with the commission for the purpose of identifying, testing, and evaluating new emissions-reducing technologies with potential for commercialization in this state and to facilitate their certification or verification; and

(3) for administrative costs incurred by the commission and the laboratory, three percent of the money in the fund.

SECTION 12. Effective September 1, 2008, Section 386.252(a), Health and Safety Code, is amended to read as follows:

(a) Money in the fund may be used only to implement and administer programs established under the plan and shall be allocated as follows:

(1) for the diesel emissions reduction incentive program, 64 [~~87.5~~] percent of the money in the fund, of which not more than 10 percent may be used for on-road diesel purchase or lease incentives;

(2) for the new technology research and development program, 33 [~~9.5~~] percent of the money in the fund, of which up to $250,000 is allocated for administration, up to $200,000 is allocated for a health effects study, $500,000 is to be deposited in the state treasury to the credit of the clean air account created under Section 382.0622 to supplement funding for air quality planning activities in affected counties, [~~and~~] not less than 10 [~~20~~] percent is to be allocated each year to support research related to air quality for the Houston-Galveston-Brazoria and Dallas-Fort Worth nonattainment areas by a nonprofit organization based in Houston, not less than 25.5 percent is to be allocated each year to that nonprofit organization based in Houston to be used to implement and administer the new technology research and development program under a contract with the commission for the purpose of identifying, testing, and evaluating new emissions-reducing technologies with potential for commercialization in this state and to facilitate their certification or verification, not more than $12,500,000 is to be allocated each year from any excess funds to be administered by the commission to fund a study of regional ozone formation in this state, meteorological and chemical modeling, and issues related to ozone formation by ozone precursors and fine particulate matter formation in this state, and the balance is to be allocated each

year to the commission to fund promising new technologies as identified through the new technology research and development program and recommended by that nonprofit organization based in Houston in order to permit obtaining the maximum credits for emissions reductions under the state's air quality state implementation plans; and

(3) for administrative costs incurred by the commission and the laboratory, three percent of the money in the fund.

SECTION 13. Section 387.003(a), Health and Safety Code, is amended to read as follows:

(a) The nonprofit organization described by Section 386.252(a)(2), under a contract with the commission as described by that section[~~, in consultation with the Texas Council on Environmental Technology~~], shall establish and administer a new technology research and development program as provided by this chapter.

SECTION 14. Section 387.005(a), Health and Safety Code, is amended to read as follows:

(a) Grants awarded under this chapter shall be directed toward a balanced mix of:

(1) retrofit and add-on technologies to reduce emissions from the existing stock of vehicles targeted by the Texas emissions reduction plan;

(2) advanced technologies for new engines and vehicles that produce very-low or zero emissions of oxides of nitrogen, including stationary and mobile fuel cells;

(3) studies to improve air quality assessment and modeling; and

(4) [~~advanced technologies that promote increased building and appliance energy performance; and~~

[~~(5)~~] advanced technologies that reduce emissions from other significant sources.

SECTION 15. Section 388.003(e), Health and Safety Code, is amended to read as follows:

(e) Local amendments may not result in less stringent energy efficiency requirements in nonattainment areas and in affected counties than the energy efficiency chapter of the International Residential Code or International Energy Conservation Code. Local amendments must comply with the National Appliance Energy Conservation Act of 1987 (42 U.S.C. Sections 6291-6309), as amended. The laboratory, at the request of a municipality or county, shall determine the relative impact of proposed local amendments to an energy code, including whether proposed amendments are substantially equal to or less stringent than the unamended code. For the purpose of establishing uniform requirements throughout a region, and on request of a council of governments, a county, or a municipality, the laboratory may recommend a climatically appropriate modification or a climate zone designation for a county or group of counties that is different from the climate zone designation in the unamended code. The laboratory shall:

(1) report its findings to the council, county, or municipality, including an estimate of any energy savings potential

above the base code from local amendments; and

(2) annually submit a report to the commission:

(A) identifying the municipalities and counties whose codes are more stringent than the unamended code, and whose codes are equally stringent or less stringent than the unamended code; and

(B) quantifying energy savings and emissions reductions from this program.

SECTION 16. Section 389.003, Health and Safety Code, is amended to read as follows:

Sec. 389.003. COMPUTING ENERGY EFFICIENCY EMISSIONS REDUCTIONS AND ASSOCIATED CREDITS. (a) The commission shall develop a method to use in computing emissions reductions obtained through energy efficiency initiatives, including renewable energy initiatives, and the credits associated with those reductions.

(b) The laboratory shall assist the commission and affected political subdivisions in quantifying, as part of the state implementation plan, credits for emissions reductions attributable to energy efficiency programs, including renewable energy programs.

SECTION 17. Section 151.0515(d), Tax Code, is amended to read as follows:

(d) This section expires September 30, 2010 [~~2008~~].

SECTION 18. Section 152.0215(c), Tax Code, is amended to read as follows:

(c) This section expires September 30, 2010 [~~2008~~].

SECTION 19. Section 501.138, Transportation Code, is

amended by amending Subsections (a) and (b) and adding Subsections (b-1), (b-2), and (b-3) to read as follows:

(a) An applicant for a certificate of title, other than the state or a political subdivision of the state, must pay the county assessor-collector a fee of:

(1) $33 if the applicant's residence is a county located within a nonattainment area as defined under Section 107(d) of the federal Clean Air Act (42 U.S.C. Section 7407), as amended, or is an affected county, as defined by Section 386.001, Health and Safety Code;

(2) $28 if the applicant's residence is any other county; or

(3) on or after September 1, 2010 [~~2008~~], $28 regardless of the county in which the applicant resides.

(b) The county assessor-collector shall send:

(1) $5 of the fee to the county treasurer for deposit in the officers' salary fund;

(2) $8 of the fee to the department:

(A) together with the application within the time prescribed by Section 501.023; or

(B) if the fee is deposited in an interest-bearing account or certificate in the county depository or invested in an investment authorized by Subchapter A, Chapter 2256, Government Code, not later than the 35th day after the date on which the fee is received; and

(3) the following amount to the comptroller at the time and in the manner prescribed by the comptroller:

(A) $20 of the fee if the applicant's residence is a county located within a nonattainment area as defined under Section 107(d) of the federal Clean Air Act (42 U.S.C. Section 7407), as amended, or is an affected county, as defined by Section 386.001, Health and Safety Code;

(B) $15 of the fee if the applicant's residence is any other county; or

(C) on or after September 1, 2010, $15 regardless of the county in which the applicant resides.

(b-1) Fees collected under Subsection (b) [~~this subsection~~] to be sent to the comptroller shall be deposited as follows:

(1) [~~(i)~~] before September 1, 2008, to the credit of the Texas emissions reduction plan fund; and

(2) on or [~~(ii)~~] after September 1, 2008, to the credit of the Texas Mobility Fund, except that $5 of each fee imposed under Subsection (a)(1) and deposited on or after September 1, 2008, and before September 1, 2010, shall be deposited to the credit of the Texas emissions reduction plan fund.

(b-2) The comptroller shall establish a record of the amount of the fees deposited to the credit of the Texas Mobility Fund under Subsection (b-1). On or before the fifth workday of each month, the department shall remit to the comptroller for deposit to the credit of the Texas emissions reduction plan fund an amount of money equal to the amount of the fees deposited by the comptroller to the credit of the Texas Mobility Fund under Subsection (b-1) in the preceding month. The department shall use for remittance to the comptroller as required by this subsection money in the state highway fund that

is not required to be used for a purpose specified by Section 7-a, Article VIII, Texas Constitution, and may not use for that remittance money received by this state under the congestion mitigation and air quality improvement program established under 23 U.S.C. Section 149.

(b-3) This subsection and Subsection (b-2) expire September 1, 2010.

SECTION 20. Section 502.1675(c), Transportation Code, is amended to read as follows:

(c) This section expires August 31, 2010 [~~2008~~].

SECTION 21. Section 548.5055(c), Transportation Code, is amended to read as follows:

(c) This section expires August 31, 2010 [~~2008~~].

SECTION 22. Sections 386.001(4), 386.057(e), 387.002, and 387.010, Health and Safety Code, and Sections 548.256(c) and (d), Transportation Code, are repealed.

SECTION 23. The Texas Commission on Environmental Quality shall prepare guidance documents for the rebate grants required by Section 386.117, Health and Safety Code, as added by this Act, not later than January 1, 2006.

SECTION 24. (a) As soon as practicable on or after the effective date of this Act, the governor shall appoint to the Texas Emissions Reduction Plan Advisory Board a representative of the nonprofit organization described by Section 386.252(a)(2), Health and Safety Code, as required by Section 386.058(b), Health and Safety Code, as amended by this Act, to replace the representative of the Texas Council on Environmental Technology serving on that

board on the effective date of this Act.

(b) As soon as practicable on or after the effective date of this Act, the governor, lieutenant governor, and speaker of the house of representatives, by mutual agreement, shall designate the terms of the appointed members of the Texas Emissions Reduction Plan Advisory Board so that the terms of seven appointed members expire on February 1, 2007, and the terms of eight appointed members expire on February 1, 2009, as provided by Section 386.058(e), Health and Safety Code, as amended by this Act.

SECTION 25. Except as otherwise provided by this Act, this Act takes effect September 1, 2005.

David Dewhurst

President of the Senate

Speaker of the House

I certify that H.B. No. 2481 was passed by the House on April 28, 2005, by a non-record vote; and that the House concurred in Senate amendments to H.B. No. 2481 on May 29, 2005, by a non-record vote; and that the House adopted H.C.R. No. 248 authorizing certain corrections in H.B. No. 2481 on May 30, 2005, by a non-record vote.

Robert Haney

Chief Clerk of the House

I certify that H.B. No. 2481 was passed by the Senate, with amendments, on May 20, 2005, by the following vote: Yeas 31, Nays 0; and that the Senate adopted H.C.R. No. 248 authorizing certain corrections in H.B. No. 2481 on May 30, 2005, by a viva-voce vote.

Patsy Spaw

Secretary of the Senate

APPROVED: 18 JUNE 05

Date

Rick Perry

Governor

FILED IN THE OFFICE OF THE SECRETARY OF STATE
12:20 PM O'CLOCK
JUN 18 2005

Roger Williams

Secretary of State

APPENDIX C

The Texas Commission on Environmental Quality (commission or agency) proposes amendments to §§101.502, 101.504, and 101.506.

The amended sections are proposed to be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The purpose of this Clean Air Interstate Rule (CAIR) revision is to incorporate legislative changes made during the 80th Texas Legislature, 2007, as prescribed by Senate Bill (SB) 1672 and federal rule revisions that the EPA has promulgated since Texas adopted the state's initial CAIR rule on July 12, 2006. Also, clarifying language is proposed to explain the allocation methodology for the 2016 and 2017 control periods for CAIR nitrogen oxides (NO_X) units commencing operation before January 1, 2001. Additionally, grammatical and formatting changes are proposed to conform with *Texas Register* and commission standards.

On May 12, 2005, the EPA promulgated CAIR to assist nonattainment areas in downwind states in complying with the National Ambient Air Quality Standards (NAAQS) for particulate matter less than or equal to 2.5 microns ($PM_{2.5}$) and eight-hour ozone. Twenty-eight eastern states and the District of Columbia were identified as upwind contributors to the nonattainment of the $PM_{2.5}$ and/or eight-hour ozone NAAQS prompting the requirement for the reduction in emissions of either sulfur dioxide (SO_2) or NO_X, or both. Twenty-five states, including Texas and the District of Columbia, were found to contribute to the downwind nonattainment of the $PM_{2.5}$ NAAQS and are required to make reductions in annual emissions of SO_2 and NO_X.

The 79th Texas Legislature, 2005, enacted House Bill (HB) 2481, §2 (codified at Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA), §382.0173), requiring Texas to participate in the EPA-administered interstate cap and trade program through the incorporation by reference of the CAIR model trading rule. HB 2481 also specified the methodology to be used in allocating the NO_X trading budget provided to Texas, identified an amount of CAIR NO_X annual allowances to be set aside for new sources, and specified that reductions associated with CAIR would only be required from new and existing electric generating units (EGUs) and not from other sources of SO_2 and NO_X emissions.

In 2007, the 80th Texas Legislature passed SB 1672 directing the commission to incorporate federal CAIR changes that the EPA finalized since the initial adoption of the CAIR rule on July 12, 2006. SB 1672 also revised the NO_X allocation methodology and the number of minimum periods specified for NO_X allocation readjustments that was directed by HB 2481. The readjustment of baseline heat inputs required in HB 2481 was the average of the three highest amounts of the CAIR NO_X units' total converted/adjusted control period heat input from control periods one through five of the previous seven control periods, with the baseline adjustment starting for the 2016 control period and readjusted every five years thereafter. However, the seven-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to applicable EGUs approximately four years in advance. SB 1672 changed the number of control periods from seven to nine and shifted the initial baseline adjustment from 2016 to 2018. Therefore, beginning with the 2018 control period and for the control period beginning every five years after 2018, CAIR NO_X units with a baseline heat input will be adjusted to reflect the average of the three highest amounts of the CAIR NO_X unit's total converted control period heat input from control periods one through five of the previous nine control periods.

Because of the shift in control periods for readjusting the baseline heat input, an allocation method is needed for 2016 and 2017. For the 2016 and 2017 control periods, CAIR NO_X units commencing operation on or after January 2, 2001, and having five or more consecutive years of commercial operation will be eligible to receive a CAIR NO_X allocation from the general pool, which is calculated as 90.5% of the Texas CAIR NO_X trading budget. Beginning in the 2018 control period, CAIR NO_X units commencing operation on or after January 1, 2001, and having five or more consecutive years of commercial operation will be eligible to receive CAIR NO_X annual allowances from the general pool if the units have a baseline heat input calculated from the applicable control periods. For example, a CAIR NO_X unit commences operation (i.e., the combustion chamber started) and commences commercial operation (i.e., begins to produce electricity) in 2010. Per SB 1672, the baseline heat input used for allocating general pool allowances for control periods 2018 through 2022 is determined from units that have 2009 through 2013 operating data. Therefore, this unit would not be eligible to receive an allocation of allowances from the general pool until 2023.

SB 1672 also omits the reference dates of the federal CAIR adoption that were specified in HB 2481 from the 79th Texas Legislature. This change will enable the commission to make subsequent changes as dictated by federal rule changes for CAIR without further legislative authority.

The proposed rule revision also incorporates revisions to the federal CAIR model trading rules. The EPA adopted revisions to 40 Code of Federal Regulations (CFR) Part 96 Subpart AA - Subpart II and Subpart AAA - Subpart III on April 28, 2006. In the April 28, 2006, revisions, the EPA changed the compliance dates for companies to submit a request for allowances from the new unit set-aside trading budget (9.5%

of the Texas CAIR NO_X trading budget) from July 1st to May 1st of the control period. For additional information regarding these revisions, please see the EPA final rule, published in the April 28, 2006, issue of the *Federal Register* (73 FR 82), available online at *www.epa.gov/fedrgstr/.*

On January 24, 2008, the EPA adopted revisions to 40 CFR Parts 72 and 75 that modify existing requirements for sources affected by CAIR. The revisions include changes implemented by the EPA's Clean Air Markets Division in its data system in order to utilize the latest modern technology. The EPA also adopted revisions to require individuals that perform emissions testing or continuous emissions monitoring system (CEMS) performance evaluations must comply with American Society for Testing and Materials (ASTM) D7036-04 "Standard Practice for Competence of Air Emission Testing Bodies." The ASTM standard sets minimum requirements for demonstrating that an air emission testing organization is competent to perform testing. For additional information regarding these revisions, please see the EPA final rule, published in the January 24, 2008, issue of the *Federal Register* (73 FR 16), available online at *www.epa.gov/fedrgstr*/.

On July 11, 2008, the United States Court of Appeals District of Columbia Circuit (Court) vacated CAIR and the CAIR Federal Implementation Plan. The Court ruled that CAIR trading programs are flawed for the following reasons: 1) because the region-wide focus on emission reductions did not factor in each state's contribution to air pollution issues; 2) the EPA did not give independent significance to the "interfere with maintenance language" in Federal Clean Air Act (FCAA), §110(a)(2)(D) and thus did not provide enough protection to downwind areas; 3) the 2015 compliance date for Phase II of CAIR is inconsistent with downwind states' 2010 attainment deadlines for $PM_{2.5}$ and ozone NAAQS; 4) SO_2 and NO_X budgets given to states were not based on the objectives of FCAA, §110(a)(2)(D) and were thus

invalid; 5) the EPA lacked authority to remove Title IV allowances through CAIR or change the amount of SO_2 emissions that an individual allowance authorizes; and 6) the EPA did not properly address certain claims of measurement errors raised by Minnesota regarding its contributions to NO_X and SO_2 emissions.

On December 23, 2008, the Court issued a revised opinion to remand without vacating CAIR back to the EPA. Therefore, the federal CAIR rule requirements remain in effect pending the promulgation by the EPA of new rules to replace it. With CAIR incorporated by reference by THSC, TCAA, §382.0173, the CAIR state rule remains in effect while the federal CAIR rule is in effect.

SECTION BY SECTION DISCUSSION

In addition to the proposed amendments to implement SB 1672 and incorporate federal rule revisions promulgated by the EPA, this rulemaking includes grammatical and formatting changes to update rule language to current *Texas Register* style and formatting requirements. These changes are non-substantive and are not specifically discussed in this preamble.

Section 101.502, Clean Air Interstate Rule Trading Program.

The proposed revision to §101.502 updates the reference to the adoption date of October 19, 2007, effective November 19, 2007, for 40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III.

Section 101.504, Timing Requirements for Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

The proposed revisions to §101.504 update the deadlines by which the executive director must submit to the EPA the CAIR NO_X annual allowance allocations for each CAIR NO_X unit subject to this division in order to comply with the minimum lead time of three years provided under 40 CFR §51.123(o)(2)(ii). The deadline to submit CAIR NO_X allocations for 2016 will be revised to October 31, 2012. Beginning in the 2017 control period and each control period thereafter, the CAIR NO_X annual allowances allocations must be submitted to the EPA 38 months prior to the beginning of the applicable control period.

The proposed revisions include deleting §101.504(c) to agree with the removal of the allocation provisions in the federal CAIR rule under 40 CFR §96.141(b)(2) and (c)(2). These provisions were originally incorporated so the EPA could allocate CAIR NO_X annual allowances if a state failed to submit timely CAIR NO_X annual allowance allocations for a control period, but the provisions were removed by the EPA in the revision published in the April 28, 2006, issue of the *Federal Register* (71 FR 82), available online at *www.epa.gov/fedrgstr/*.

The existing subsection (d) is proposed to be re-lettered as subsection (c).

Section 101.506, Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

The proposed revisions to §101.506(a) describe the methodology used in distributing CAIR NO_X annual allowances, in tons, for each CAIR NO_X unit subject to this subsection. For control periods 2009 through 2017, the baseline heat input for CAIR NO_X units commencing operation before January 1, 2001, will be the average of the three highest amounts of the CAIR NO_X unit's historical heat input, adjusted for fuel type, from calendar years 2000 through 2004. As required by SB 1672, beginning with the 2018 control

period and for the control period beginning every five years thereafter, the baseline heat input for CAIR NO_X units commencing operation before January 1, 2001, will be readjusted using the average of the three highest amounts of the CAIR NO_X unit's control period heat input, adjusted for fuel type, from control periods one through five of the previous nine control periods.

Under the proposed revisions to §101.506(b)(2) and (3), for control periods 2015, 2016, and 2017, CAIR NO_X units commencing operation on or after January 1, 2001, with five or more consecutive years of operation will be eligible to receive CAIR NO_X annual allowances from the general pool by establishing a baseline heat input from the first five years of commercial operation. As required by SB 1672, for the 2018 control period and every five years thereafter, the baseline heat input for CAIR NO_X units commencing operation on or after January 1, 2001, will be readjusted using the converted control period heat inputs from one through five of the previous nine control periods.

The proposed revisions to §101.506(d) incorporate federal rule revisions to CAIR changing the submittal deadline from July 1st to May 1st. Therefore, the proposed amendments to §101.506(d) require CAIR-designated representatives of CAIR NO_X units that commence operation on or after January 1, 2001, and that have not established a historical baseline heat input in accordance with §101.506(b)(2) or (3), to submit requests for CAIR NO_X annual allowances from the new unit set-aside trading budget on or before May 1st of the first control period for which the requests are being made and after the date that the CAIR NO_X units commence commercial operation.

The proposed revisions to §101.506(g) incorporate federal rule revisions to CAIR changing the submittal deadline from July 1st to May 1st and delete the word "complete" to clarify the submittal deadline.

Therefore, the proposed revision to §101.506(g) requires the gross electrical output of the generator or generators served by the CAIR NO_X unit and total heat energy of any steam produced by the CAIR NO_X unit to be submitted in writing to the executive director by the latter of May 1, 2011, or May 1st of the control period immediately following the CAIR NO_X unit's fifth consecutive year of commercial operation. For example, CAIR NO_X unit "B2" commences operation on December 23, 2003, and commences commercial operation on January 9, 2004. The CAIR-designated representative or alternate must submit to the commission by May 1, 2011, the total yearly gross electrical output and the total yearly heat energy of any steam produced by B2 from January 9, 2004, through December 31, 2008.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS

Nina Chamness, Analyst, Strategic Planning and Assessment, has determined that, for the first five-year period the proposed rules are in effect, no significant fiscal implications are anticipated for the agency or other units of state or local governments as a result of administration or enforcement of the proposed rules. The agency will implement the proposed rules utilizing current resources. Local governments that own or operate EGUs may pay additional monitoring and testing costs, but these additional costs are not expected to be significant.

The proposed rules implement the provisions of SB 1672, which allow the agency to comply with changes made to the federal CAIR by the EPA. Recent federal court decisions require the EPA to revise its original proposed rule but until those revisions have been adopted, the most recent federal CAIR rules are adopted by reference in SB 1672. Specifically, SB 1672 expands the number of control periods that are used to calculate the baseline, which in turn is used to calculate the heat input of a unit from seven to nine years. The baseline would govern the amount of NO_X that would be permissible under CAIR. SB

1672 also requires the agency to implement other CAIR provisions that the EPA finalized after SB 1672 was passed. These provisions include a change in the deadline that companies must comply with for submitting their request for NO_X emission allowances and additional testing and monitoring options that EGUs can use to measure and report these emissions. The EPA has also mandated that those performing CEMS evaluations and stack testing comply with ASTM D7036-04 requirements so that they can demonstrate competence in performing these monitoring tasks.

The proposed rules will apply to any stationary, fossil-fuel-fired boiler or combustion turbine serving at any time a generator with a nameplate capacity of more than 25 megawatts of electricity that produces electricity for sale. It is estimated that there may be as many as 400 of these types of machines that fit the criteria governed by the proposed rule and the federal statute. Staff estimates that approximately 48 of these types of boilers or combustion turbines are owned by local governments operating EGUs, and approximately 352 are thought to be owned by large businesses operating EGUs.

The proposed rules, which implement the EPA requirements, will require that companies performing CEMS evaluations and stack testing comply with ASTM D7036-04 requirements. The EPA has estimated that compliance with ASTM D7036-04 requirements may require a company planning to test for CAIR compliance pay as much as $100 per year to test its ability to comply with ASTM D7036-04 standards and a one-time cost of about $4,000 to establish a quality CAIR monitoring program. A testing company is expected to spread these costs to all the EGUs that choose the company to perform the needed CEMS evaluations and stack testing, and no one EGU, including those owned by local governments, is expected to experience significant cost increases as a result of the proposed rules.

PUBLIC BENEFITS AND COSTS

Ms. Chamness also determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from the changes seen in the proposed rules will be compliance with state and federal laws and increased environmental protection due to the reduction of NO_X and SO_2 emissions from stationary sources at affected EGUs.

Approximately 352 of the estimated 400 stationary sources governed by the proposed rule are thought to be owned by large businesses operating EGUs. An owner or operator of an EGU will typically contract a company to do testing and CEMS certification. There are over 240 national and international testing companies and at least 19 of these companies may be located in Texas. Most testing companies are thought to be small businesses, and the EPA has estimated that the companies will incur some additional costs, although not anticipated to be significant, to comply with ASTM D7036-04 standards. These additional costs, which are found in the COSTS TO STATE AND LOCAL GOVERNMENT section of this preamble, are not expected to have a significant fiscal implication for EGUs owned by large businesses because testing companies are expected to spread increased costs among several customers.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

No adverse fiscal implications are anticipated for small or micro-businesses as a result of the proposed rules. Although staff does not have the data needed to estimate how many companies that might perform CEMS evaluations and stack testing for CAIR requirements, staff believes that many of them might be small or micro-businesses. The EPA has estimated that compliance with ASTM D7036-04 requirements may require a company planning to test for CAIR compliance pay as much as $100 per year to test its ability to comply with ASTM D7036-04 standards and a one time cost of about $4,000 to establish a

quality CAIR monitoring program. A testing company can choose whether or not it will incur these certification costs, and if it chooses to perform this service, the company is expected to recover these costs from its customers.

SMALL BUSINESS REGULATORY FLEXIBILITY ANALYSIS

The commission has reviewed this proposed rulemaking and determined that a small business regulatory flexibility analysis is not required because the proposed rules do not adversely affect a small or micro-business in a material way for the first five years that the proposed rules are in effect. In addition, the proposed rule is required by state and federal law in order to protect the environment and public health and safety.

LOCAL EMPLOYMENT IMPACT STATEMENT

The commission has reviewed this proposed rulemaking and determined that a local employment impact statement is not required because the proposed rules do not adversely affect a local economy in a material way for the first five years that the proposed rules are in effect.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the proposed rulemaking meets the definition of a "major environmental rule" as defined in that statute. A "major environmental rule" means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of

the state or a sector of the state. The proposed rulemaking does not, however, meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The proposed rules are an incorporation by reference of revisions to the federal CAIR. The commission previously adopted rules to incorporate the CAIR, as discussed elsewhere in this preamble. The CAIR includes EPA-administered emissions trading programs that will be governed by model rules provided in the CAIR, which states may incorporate by reference. The EPA found that Texas is among several states that contribute significantly to the nonattainment of the NAAQS for $PM_{2.5}$ in downwind states. The EPA is requiring upwind states to revise their SIPs to include control measures to reduce emissions of SO_2 and/or NO_X, which are both precursors to $PM_{2.5}$ formation. Reducing upwind precursor emissions will assist downwind $PM_{2.5}$ nonattainment areas to achieve the NAAQS in a more equitable, cost-effective manner than if those areas implemented local emission control strategies. The EPA has specified the amount of each state's required reductions, but each state has flexibility in how these reductions occur. If states choose to control EGUs, then they must establish a budget or cap for those sources. The CAIR defines the EGU budgets for the affected states if the states choose to control only EGUs or if they choose to control other sources to achieve some or all of their reductions. A state may adopt the CAIR NO_X

model allowance allocation methodology or choose an alternative method to allocate the state budget of NO_X emissions allowances to sources in that state.

Specifically, the proposed rulemaking would incorporate by reference revisions to the CAIR model emissions trading rules located in 40 CFR Part 96, Subpart AA - Subpart II, and Subpart AAA - Subpart III. In addition, the rulemaking proposes revisions to an alternative NO_X allowance allocation methodology for Texas CAIR NO_X sources in lieu of the model rule methodology in 40 CFR Part 96, Subpart EE. The proposed rulemaking fulfills the requirements of SB 1672, enacted by the 80th Legislature, to incorporate CAIR by reference, including the five subsequent rule revisions that the EPA has promulgated to CAIR since Texas adopted the initial CAIR SIP revision on July 12, 2006, as well as revisions to the NO_X allocation methodology as prescribed by SB 1672. SB 1672 relates to correcting the number of minimum periods specified for NO_X allocation allowance readjustments that were directed by HB 2481. HB 2481 revised the baseline of existing units by reviewing heat-input data every five years by looking back at the three highest years of the previous seven years. However, the five-year period did not provide adequate time to accommodate the EPA's requirement of providing allocations to them approximately four years in advance of the applicable period. Therefore, the number of control periods was changed from seven to nine in SB 1672, and the allocation update was shifted from 2016 to 2018. The incorporation of revisions to CAIR and the changes resulting from SB 1672 will allow CAIR to continue to be implemented in Texas, in accordance with the state statutory requirements. The proposed incorporation of the federal rule is intended to protect the environment and to reduce risks to human health and safety from environmental exposure by reducing NO_X and SO_2 emissions from upwind states so that downwind states may reach attainment of the NAAQS for $PM_{2.5}$. As discussed elsewhere in this preamble, the proposed revisions are not expected to impose significant costs on regulated entities. While

continued implementation of the CAIR is intended to protect human health and the environment, it may adversely affect in a material way sources in the state that fall under the applicability requirements in the federal rule. Cost and benefits of the revisions to CAIR were analyzed by the EPA during the federal notice and comment rulemaking for the CAIR. CAIR is a required federal program, and the ability of states to modify the federal requirements is limited. Although CAIR was vacated by the United States Court of Appeals for the District of Columbia, it was not remanded. Therefore, its requirements remain in effect pending promulgation by the EPA of new rules to replace it. Because SB 1672 requires Texas to incorporate CAIR by reference, this proposed rulemaking would implement the CAIR requirements that are currently in effect.

The proposed rulemaking would implement requirements of the FCAA. Under 42 United States Code (USC), §7410(a)(2)(D), each SIP must contain adequate provisions prohibiting any source within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment of the NAAQS in any other state. While 42 USC, §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, SIPs must include "enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter," (42 USC, Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the

requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. Additionally, states have further obligations under 42 USC, §7410(a)(2)(D), to address interstate transport of pollutants that contribute significantly to nonattainment in, or interfere with maintenance by, another state. In the CAIR, the EPA found that 28 states and the District of Columbia contribute significantly to nonattainment of the $PM_{2.5}$ or eight-hour ozone NAAQS in downwind areas. The EPA is requiring these upwind states to revise their SIPs to include control measures to reduce emissions of SO_2 and/or NO_X, with limited flexibility. Adoption of the federal CAIR, including revisions and participation in its emissions cap and trade approach for annual SO_2 and NO_X emissions to reduce downwind $PM_{2.5}$ is the method Texas has chosen to achieve those reductions in a flexible and cost-effective manner.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by SB 633 during the 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth

in the bill that exempted proposed rules from the full analysis unless the rule is a major environmental rule that exceeds a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states have flexibility to develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to

have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App. Austin 1990, no writ). *Cf. Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Dudney v. State Farm Mut. Auto Ins. Co.*, 9 S.W.3d 884, 893 (Tex. App. Austin 2000); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App. Austin 2000, pet. denied); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." The legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government Code, §2001.0225.

The specific intent of the proposed rulemaking is to protect the environment and to reduce risks to human health by adoption of the revisions to the federal CAIR by reference in addition to changes resulting from SB 1672. The proposed rulemaking does not exceed a standard set by federal law nor exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this proposed rulemaking. Finally, this proposed rulemaking was not developed solely under the general powers of the agency but is required by THSC, TCAA, §382.0173. Therefore, this proposed rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because

although the proposed rulemaking meets the definition of a "major environmental rule," it does not meet any of the four applicability criteria for a major environmental rule.

The commission invites public comment regarding the draft regulatory impact analysis determination during the public comment period.

TAKINGS IMPACT ASSESSMENT

The commission evaluated the proposed rulemaking and performed an assessment of whether Texas Government Code, Chapter 2007, is applicable. The specific purpose of the proposed rulemaking is to incorporate by reference revisions to the federal CAIR emissions trading rules located in 40 CFR Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III, and to incorporate legislative changes during the 80th Texas Legislature as prescribed by SB 1672. In 2007, the 80th Texas Legislature passed SB 1672 that allows the commission to incorporate federal CAIR changes that the EPA has finalized since the initial adoption of the CAIR rules on July 12, 2006, and revise the NO_X allocation methodology as prescribed by SB 1672. SB 1672 revises the number of minimum periods specified for NO_X allowance allocation readjustments that was directed by HB 2481, as discussed elsewhere in this preamble. Additionally, the EPA promulgated several changes to the federal CAIR, as discussed elsewhere in this preamble. Although CAIR was vacated by the United States Court of Appeals for the District of Columbia, it has not been remanded, and therefore its requirements remain in effect pending the promulgation by the EPA of new rules to replace it. Because SB 1672 requires Texas to incorporate CAIR by reference, this proposed rulemaking would implement the CAIR requirements that are currently in effect. Texas Government Code, §2007.003(b)(4), provides that Texas Government Code, Chapter

2007 does not apply to this proposed rulemaking because it is an action reasonably taken to fulfill an obligation mandated by federal law and by state law.

In addition, the commission's assessment indicates that Texas Government Code, Chapter 2007 does not apply to these proposed rules because this is an action that is taken in response to a real and substantial threat to public health and safety; that is designed to significantly advance the health and safety purpose; and that does not impose a greater burden than is necessary to achieve the health and safety purpose. Thus, this action is exempt under Texas Government Code, §2007.003(b)(13). The EPA promulgated the CAIR rule, and revisions to the CAIR, to reduce SO_2 and NO_X emissions from upwind states so that downwind states may reach attainment of the NAAQS for $PM_{2.5}$. The proposed rules will enable Texas to implement the federal emissions budget and trading program and impose its requirements on new and existing fossil fuel-fired electric utility units, ultimately ensuring reductions of SO_2 and NO_X emissions. The action will specifically advance the health and safety purpose by reducing $PM_{2.5}$ levels through an emissions cap and gradual reductions in emissions of SO_2 and NO_X. The rules specifically target a category of sources with significant SO_2 and NO_X emissions, and through the cap and trade program support cost-effective control strategies. Consequently, the proposed rulemaking meets the exemption criteria in Texas Government Code, §2007.003(b)(4) and (13). For these reasons, Texas Government Code, Chapter 2007 does not apply to this proposed rulemaking.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 *et seq.*), and the commission rules in 30 TAC

Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by §281.45(a)(3) and 31 TAC §505.11(b)(2), concerning Actions and Rules Subject to the Coastal Management Program, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission reviewed this action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(l)). No new sources of air contaminants are authorized and the proposed new rules will maintain at least the same level of or increase the level of emissions control as the existing rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with federal regulations in 40 CFR, to protect and enhance air quality in the coastal areas (31 TAC §501.32). This rulemaking action complies with 40 CFR Part 51, concerning Requirements for Preparation, Adoption, and Submittal of Implementation Plans. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

The requirements of 42 USC, §7410 are applicable requirements of 30 TAC Chapter 122. Facilities that are subject to the Federal Operating Permit Program will be required to obtain, revise, reopen, and renew their federal operating permits as appropriate in order to include CAIR.

ANNOUNCEMENT OF HEARINGS

Public hearings for this proposed rulemaking and SIP revision are scheduled in conjunction with the proposed repeal of the Clean Air Mercury Rule in Fort Worth on October 20, 2009, at 2:00 p.m. at the Texas Commission on Environmental Quality Regional Office, located at 2309 Gravel Drive; in Austin on October 21, 2009, at 2:00 p.m. in Building C, Room 131E at the Texas Commission on Environmental Quality complex, located at the commission's central office located at 12100 Park 35 Circle; and in Houston on October 22, 2009, at 2:00 p.m. in Conference Room A at the Houston-Galveston Area Council, located at 3555 Timmons Lane. Each hearing is structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Charlotte Horn, Office of Legal Services at (512) 239-0779. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Comments may be submitted to Jessica Rawlings, Texas Register Team, Office of Legal Services, Texas Commission on Environmental Quality, MC 205, P.O. Box 13087, Austin, Texas 78711 or faxed to (512) 239-4808. All comments should reference Rule Project Number 2007-053-101-EN. Electronic comments may be submitted at: *http://www5.tceq.state.tx.us/rules/ecomments/*. File size restrictions may apply to comments being submitted via the eComments system. The comment period closes October 26, 2009. Copies of the proposed rules can be obtained from the commission's Web site at

http://www.tceq.state.tx.us/nav/rules/propose_adopt.html. For further information, please contact

Brandon Greulich, Air Quality Planning Section, (512) 239-4904.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 7: CLEAN AIR INTERSTATE RULE

§§101.502, 101.504, 101.506

STATUTORY AUTHORITY

The amendments are proposed under Texas Water Code, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the Texas Water Code; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA. The amendments are also proposed under THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.014, concerning Emission Inventory; §382.016, concerning Monitoring Requirements; §382.0173, concerning Adoption of Rules Regarding Certain State Implementation Plan Requirements and Standards of Performance for Certain Sources; and §382.054, concerning Federal Operating Permits; and FCAA, 42 USC, §§7401 *et seq*., which requires states to include in their adequate provisions prohibiting any source within the state from emitting any air pollutant in amounts that will contribute significantly to nonattainment, or interfere with maintenance of, the national ambient air quality standard in any other state.

The proposed amendments implement THSC, §§382.002, 382.011, 382.012, 382.014, 382.016, §382.0173, and §382.054; and FCAA, 42 USC, §§7401 *et seq*.

§101.502. Clean Air Interstate Rule Trading Program.

(a) The commission incorporates by reference, except as specified in this division, the provisions of 40 Code of Federal Regulations (CFR) Part 96, Subpart AA - Subpart II and Subpart AAA - Subpart III (as amended through October 19, 2007 (72 FR 59190)) [May 12, 2005 (70 FR 25162))] for purposes of implementing the Clean Air Interstate Rule (CAIR) trading programs for annual emissions of oxides of nitrogen (NO_X) and sulfur dioxide to meet the requirements of Federal Clean Air Act, §110(a)(2)(D).

(b) Owners and operators of sources subject to 40 CFR Part 96, Subpart AA - Subpart II or Subpart AAA - Subpart III shall comply with those requirements.

(c) The methodologies and procedures for determining and recording each subject source's CAIR NO_X [Clean Air Interstate Rule oxides of nitrogen] allowance allocation in 40 CFR Part 96, Subpart EE are replaced by the requirements of this division.

§101.504. Timing Requirements for Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

(a) The executive director shall submit to the United States Environmental Protection Agency (EPA) the Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_X) allowance allocations determined

in accordance with §101.506(c) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations) by the following dates:

(1) October 31, 2006, for the 2009 - 2014 control periods;

(2) October 31, 2011, for the 2015 control period;

(3) October 31, 2012, [2014,] for the 2016 control period; and

(4) 38 [14] months prior to the beginning of each applicable control period for the control period beginning in 2017 and for each control period thereafter.

(b) For the control period beginning in 2009, and for each control period thereafter, the executive director shall submit to EPA the CAIR NO_X allowance allocations determined in accordance with §101.506(d) and (e) of this title by October 31 of the applicable control period.

[(c) If the executive director fails to submit to EPA the CAIR NO_X allowance allocations in accordance with subsection (a) of this section, EPA will assume that the allocations of CAIR NO_X allowances for the applicable control period are the same as for the control period that immediately precedes the applicable control period, except that, if the applicable control period is in 2015, EPA will assume that the allocations equal 83% of the allocations for the control period that immediately precedes the applicable control period.]

(c) [(d)] If the executive director fails to submit to EPA the CAIR NO_X allowance allocations in accordance with subsection (b) of this section, EPA will assume that no CAIR NO_X allowances are to be allocated, for the applicable control period, to any CAIR NO_X unit that would otherwise be allocated CAIR NO_X allowances under §101.506(d) and (e) of this title.

§101.506. Clean Air Interstate Rule Oxides of Nitrogen Allowance Allocations.

(a) For units commencing operation before January 1, 2001:

(1) for each control period in 2009 - 2017 [2015], the baseline heat input, in million British thermal units (MMBtu), is the average of the three highest amounts of the unit's adjusted control period heat input for 2000 - 2004 with the adjusted control period heat input for each year calculated as follows:

(A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90%;

(B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50%; and

(C) if the unit is not subject to subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30%.

(2) for the 2018 control period [beginning January 1, 2016,] and for the control period beginning every five years thereafter, the baseline heat input must be adjusted to reflect the average of the three highest amounts of the unit's adjusted control period heat input from control periods one through five of the preceding nine [seven] control periods with the adjusted control period heat input for each year calculated as follows:

(A) if the unit is coal-fired during the year, the unit's control period heat input for such year is multiplied by 90%;

(B) if the unit is natural gas-fired during the year, the unit's control period heat input for such year is multiplied by 50%; and

(C) if the unit is not subject to subparagraph (A) or (B) of this paragraph, the unit's control period heat input for such year is multiplied by 30%.

(b) For units commencing operation on or after January 1, 2001:

(1) for each control period in 2009 - 2014, Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_X) allowances must be allocated from the new unit set-aside identified under §101.503(b) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget) and determined in accordance with subsection (d) of this section;

(2) for the 2015, 2016, and 2017 control periods, [period beginning January 1, 2015] for units operating each calendar year during a period of five or more consecutive years, the baseline heat input is the average of the three highest amounts of the unit's total converted control period heat input over the first such five years. The converted control period heat input for each year is calculated as follows:

(A) except as provided in subparagraph (B) or (C) of this paragraph, the converted control period heat input equals the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 British thermal units per kilowatt-hour (Btu/kWh), if the unit is coal-fired for the year, or 6,675 Btu/kWh, if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/MMBtu. If a generator is served by two or more units, then the gross electrical output of the generator must be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;

(B) for a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted heat input is the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and converted to MMBtu by dividing by 1,000,000 Btu/MMBtu; or

(C) for a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the

sequential use of energy, the converted heat input is determined using the equation in the following figure.

Figure: 30 TAC §101.506(b)(2)(C) (No change.)

$$HI = \frac{\left(O \times 3{,}414 \text{Btu/kWh}\right) + \frac{HE}{0.8}}{1{,}000{,}000 \text{ Btu/MMBtu}}$$

Where:

Btu	=	British thermal units.
HE	=	the total heat energy, in Btu, of the steam produced by any associated heat recovery steam generator during the control period.
HI	=	the converted heat input, in MMBtu, of the combustion turbine cogeneration unit.
kWh	=	kilowatt-hour.
MMBtu	=	million British thermal units
O	=	the gross electrical output during the control period of the enclosed device comprising the compressor, combustor, and turbine.

(3) for the 2018 control period [beginning January 1, 2016,] and for the control period beginning every five years thereafter, for units operating each calendar year during a period of five or more consecutive years, the baseline heat input must [shall] be adjusted to reflect the average of the three highest amounts of the unit's converted control period heat input from control periods one through five of the preceding nine [seven] control periods. The converted control period heat input for each year is calculated as follows:

(A) except as provided in subparagraph (B) or (C) of this paragraph, the converted control period heat input equals the control period gross electrical output of the generator or generators served by the unit multiplied by 7,900 Btu/kWh, if the unit is coal-fired for the year, or 6,675 Btu/kWh, if the unit is not coal-fired for the year, and divided by 1,000,000 Btu/MMBtu, provided that if a generator is served by two or more units, then the gross electrical output of the generator must be attributed to each unit in proportion to the unit's share of the total control period heat input of such units for the year;

(B) for a unit that is a boiler and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted control period heat input equals the total heat energy (in Btu) of the steam produced by the boiler during the control period, divided by 0.8 and converted to MMBtu by dividing by 1,000,000 Btu/MMBtu; or

(C) for a unit that is a combustion turbine and has equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy, the converted control period heat input is determined using the equation in the following figure.

Figure: 30 TAC §101.506(b)(3)(C) (No change.)

$$HI = \frac{\left(O \times 3{,}414 \text{Btu/kWh}\right) + \frac{HE}{0.8}}{1{,}000{,}000 \text{ Btu/MMBtu}}$$

Where:

Btu = British thermal units

HE = the total heat energy, in Btu, of the steam produced by any associated heat recovery steam generator during the control period.

HI = the converted heat input, in MMBtu, of the combustion turbine cogeneration unit.

kWh = kilowatt-hour

MMBtu = million British thermal units

O = the gross electrical output during the control period of the enclosed device comprising the compressor, combustor, and turbine.

(c) For units with a baseline heat input calculated under subsection (a) or (b)(2) or (3) of this section, CAIR NO_X allowances must be allocated according to the equation in the following figure.

Figure: 30 TAC §101.506(c) (No change.)

$$A = \frac{HI}{\sum_{i=1}^{n} HI_i} \times B$$

Where:

A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_X) allowances allocated to a CAIR NO_X unit rounded to the nearest whole allowance.

i = each CAIR NO_X unit qualifying for an allocation under this subsection.

n = the total number of CAIR NO_X units qualifying for an allocation under this subsection.

HI = the baseline heat input for a CAIR NO_X unit qualifying for an allocation under this section as calculated under subsection (a) or (b)(2) or (3) of this section.

B = a total amount of CAIR NO_X allowances equal to 90.5% of the NO_X trading budget identified in subsection (a) of this section, except as provided in subsection (e) of this section.

(d) For units commencing operation on or after January 1, 2001, and that have not established a baseline heat input in accordance with subsection (b)(2) or (3) of this section, CAIR NO_X allowances must be allocated according to the following.

(1) Beginning with the later of the control period in 2009 or the first control period after the control period in which the CAIR NO_X unit commences commercial operation and until the first control period for which the unit is allocated CAIR NO_X allowances under subsection (c) of this section, CAIR NO_X allowances must be allocated from the new unit set-aside identified under §101.503(b) of this title. For the first control period in which a CAIR NO_X unit commences commercial operation, such CAIR NO_X unit will not receive a CAIR NO_X allocation from the new unit set-aside.

(2) To receive a CAIR NO_X allowance allocation from the new unit set-aside, the CAIR designated representative shall submit to the executive director a written request on or before May 1 [July 1] of the first control period for which the CAIR NO_X allowance allocation is requested and after the date that the CAIR NO_X unit commences commercial operation.

(3) In a CAIR NO_X allowance allocation request under paragraph (2) of this subsection, the amount of CAIR NO_X allowances requested for a control period must not exceed the CAIR NO_X unit's total tons of NO_X emissions reported to EPA for the calendar year immediately preceding such control period.

(4) The executive director shall review each CAIR NO_X allowance allocation request submitted in accordance with this subsection and shall allocate CAIR NO_X allowances for each control period as follows.

(A) The executive director shall accept a CAIR NO_X allowance allocation request only if the request meets, or is adjusted as necessary to meet, the requirements of this subsection.

(B) On or after May 1 [July 1] of the control period, the executive director shall determine the sum of all accepted CAIR NO_X allowance allocation requests for the control period.

(C) If the amount of CAIR NO_X allowances in the new unit set-aside for the control period is greater than or equal to the sum under subparagraph (B) of this paragraph, then the executive director shall allocate the full amount of CAIR NO_X allowances requested to each CAIR NO_X unit covered under a CAIR NO_X allowance allocation request that was accepted by the executive director.

(D) If the amount of CAIR NO_X allowances in the new unit set-aside for the control period is less than the sum under subparagraph (B) of this paragraph, then the executive director

shall allocate CAIR NO_X allowances to each CAIR NO_X unit covered under a CAIR NO_X allowance allocation request accepted by the executive director according to the equation in the following figure.

Figure: 30 TAC §101.506(d)(4)(D) (No change.)

$$A = \frac{RQ}{\sum_{i=1}^{n} RQ_i} \times SA$$

Where:

A = the amount of Clean Air Interstate Rule (CAIR) oxides of nitrogen (NO_X) allowances, rounded to the nearest whole allowance, allocated to each CAIR NO_X unit under a CAIR NO_X unit allocation request accepted by the executive director.

i = each CAIR NO_X allowance allocation request accepted by the executive director.

n = the total number of CAIR NO_X allowance allocation requests accepted by the executive director.

RQ = the amount of the CAIR NO_X allowances requested, as adjusted under subparagraph (A) of this paragraph, for each CAIR NO_X unit covered under a CAIR NO_X allowance allocation request accepted by the executive director.

SA = the total amount of CAIR NO_X allowances in the new unit set-aside identified under §101.503(b) of this title (relating to Clean Air Interstate Rule Oxides of Nitrogen Annual Trading Budget).

(E) The executive director shall notify each CAIR designated representative who submitted a CAIR NO_X allowance allocation request of the amount of CAIR NO_X allowances, if any, allocated for the control period to the CAIR NO_X unit covered under the request.

(e) If, after completion of the procedures under subsection (d) of this section for a control period, any unallocated CAIR NO_X allowances remain in the new unit set-aside for the control period, the executive director shall allocate to each CAIR NO_X unit receiving an allocation under subsection (c) of this section an amount of CAIR NO_X allowances equal to the total amount of such remaining unallocated CAIR NO_X allowances, multiplied by the unit's allocation under subsection (c) of this section, divided by 90.5% of the NO_X trading budget identified in subsection (a) of this section, and rounded to the nearest whole allowance as appropriate.

(f) A unit's control period heat input, and a unit's status as coal-fired or natural gas-fired, for a calendar year under subsection (a) of this section, and a unit's total tons of NO_X emissions during a calendar year under subsection (d) of this section, must be determined in accordance with 40 Code of Federal Regulations (CFR) Part 75, to the extent the unit was otherwise subject to the requirements of 40 CFR Part 75 for the year, or must be based on the best available data reported to the executive director for the unit, to the extent the unit was not otherwise subject to the requirements of 40 CFR Part 75 for the year.

(g) On or before the latter of May 1, 2011, [July 1, 2011,] or May 1 [July 1] of the control period immediately following a unit's fifth [complete,] consecutive year of commercial operation, the CAIR designated representative of a unit establishing a baseline heat input in accordance with subsection (b)(2) or (3) of this section shall submit, on a form specified by the executive director, written certification of the gross electrical output of the generator or generators served by the unit and the total heat energy of any steam produced by the unit during the first five years of commercial operation.